

The Foreign Comparative Testing Program Handbook



Office of the Under Secretary of Defense (Acquisition and Technology) Defense Security Cooperation Agency (Policy)



FOREIGN COMPARATIVE TESTING PROGRAM

HANDBOOK

1998

Approved by

Office of the Under Secretary of Defense (Acquisition and Technology) Director, Test Systems, Engineering and Evaluation

FOREWORD

The Foreign Comparative Testing (FCT) Program is a Congressionally mandated effort that supports U.S. policy of encouraging international armaments co-operation and helps reduce overall Department of Defense acquisition costs by facilitating procurement of foreign non-developmental items (NDI). The purpose of the FCT Program is to test and evaluate foreign non-developmental equipment that demonstrates potential to satisfy user requirements. Congressionally mandated in 1989 by Title 10, United States Code, Section 2350, the FCT Program consolidated the earlier Foreign Weapons Evaluation and NATO Comparative Test programs.

DoD Directive 5000.3-M-2, Foreign Comparative Testing (FCT) Program Procedures Manual, dated January 1994, describes the FCT Program, the project selection process, and identifies reporting requirements. This directive also identifies the principle participants and their responsibilities in support of the FCT Program.

This handbook is issued to help readers understand how to manage a FCT project successfully from initial nomination through eventual procurement. It is intended to be a living document that will be amended as necessary for easier use or conform to changes in Department of Defense policy or procedures. This handbook is designed to provide consolidated OSD guidance, "lessons learned" information, references and procedures to the Services, Commanders in Chiefs (CINCs), Defense Agencies, OSD Staff, U.S. Offices of Defense Cooperation, foreign vendors and their U.S. representatives, and foreign embassy/government officials.

The proponent of this handbook is the Director, Test, Systems Engineering and Evaluation. Recommended changes and suggestions for additions should be forwarded to: Program Manager, Foreign Comparative Testing Program, Suite 303 East Tower, 1111 Jefferson Davis Highway, Arlington, VA 22202.

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Director, Test, Systems Engineering and Evaluation

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FCT HANDBOOK INTRODUCTION

HOW TO USE THIS HANDBOOK

This handbook exists to help readers understand how to manage a project successfully in the Foreign Comparative Testing (FCT) Program from initial proposal through procurement. The

handbook is intended to be a living document that will be amended for easier use or to conform to changes in Department of Defense policy or procedures. Readers are encouraged to contact the FCT Program Office via e-mail with recommended improvements to the handbook.

The handbook exists to help the reader achieve a successful FCT.

Each chapter in the handbook is designed to stand alone. This structure helps the reader answer questions without having to digest the entire handbook. Should you read the entire handbook, you may notice some redundancy between chapters because of the interrelationship among the different parts of the FCT process. The use of Department of Defense acronyms has been kept to a minimum to avoid confusing non-Defense Department readers.

The table of contents should enable readers to find the chapter and section that addresses their questions or concerns. On a periodic basis, additional or clarifying information concerning the handbook will be posted to the FCT Homepage on the World Wide Web. If the handbook or listed references do not provide the answers, the reader is encouraged to contact a Service-level FCT point of contact (POC). If the Service-level POCs cannot answer these questions, please contact the FCT Program Office via e-mail.

The handbook is designed to alert the reader to organizations normally involved in bringing an FCT project to a successful completion. Understanding this interrelationship is one of the first steps to success because it suggests who should be considered for inclusion on the FCT project Integrated Product Team. This handbook is intended to help in all aspects of the FCT process from initial nomination through eventual procurement.

FCT Program Office

Readers can contact the FCT Program Office at e-mail address FCT@acq.osd.mil; phone, U.S (703) 601-3831; fax, (703) 602-7837; or international (country access code for USA) + 1 + (703) 601-3831 or fax (country access code for USA) + 1 + (703) 602-7837. Changes to these and other points of contact will be noted on the FCT Homepage.

FCT Program Information on World Wide Web

Information on the FCT Program, this FCT Handbook, and updates to the FCT Handbook are available through the World Wide Web at the Foreign Comparative Testing Program Homepage at:

http://www.acq.osd.mil/te/programs/fct/

or by searching for the key words "Foreign Comparative Testing" using a web search program.

Department of Defense Acquisition Deskbook on CD-ROM

Additionally, the Defense Acquisition Deskbook, available on Compact Disk-Read Only Memory (CD-ROM) through the Defense Acquisition Deskbook Joint Program Office ((513) 255-0423) or on the World Wide Web Homepage address http://deskbook.osd.mil/, contains information on the Foreign Comparative Testing Program and acquisition in the Department of Defense in general.

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INTRODUCTION

OVERVIEW

The Foreign Comparative Testing (FCT) Program is a uniquely successful acquisition tool. Since 1980, the FCT Program has led to the procurement of billions of dollars worth of foreign nondevelopmental items. At the same time, the Program has reaped substantial savings in research and development costs, reduced development times, and accelerated the fielding of equipment and capabilities critical to the readiness and safe operation of the U.S. Armed Forces. Although this leveraging of foreign research and development is aimed at improving the U.S. Armed Forces' operational performance, the FCT Program's savings of dollars ultimately benefit the U.S. taxpayer. Additionally, in the private sector, the FCT Program has served as a catalyst for industry teaming arrangements which have been productive for both U.S. and foreign industries in an increasingly competitive world market. The FCT Program holds the promise of even greater success in the future as its benefits become more widely known.

Even with this record of success, the FCT Program is just one of the tools in the acquisition manager's toolbox. The decision to use FCT remains within the sponsoring organizations.

Therefore, the FCT planning philosophy is for the U.S. Military Services (Army, Navy, Marine Corps, Air Force) and U.S. Special Operation Command (collectively referred to as sponsoring organizations) to do detailed or micro-planning in order to execute their approved FCT projects. The I

FCT process concentrates on front-end planning to ensure success.

order to execute their approved FCT projects. The FCT proposal process concentrates on frontend planning to ensure success.

PURPOSE OF THE HANDBOOK

The purpose of the handbook is to provide all organizations and individuals involved either directly or indirectly in the FCT process with a ready reference that will answer questions and assist them in working successfully in the FCT Program.

The FCT Program is a diverse community including the Department of Defense, foreign government organizations, and foreign and U.S. industries and industry associations. Because of this diversity, the handbook addresses a variety of issues necessary to understand and use the FCT Program. For example, the scope of the handbook ranges from information on the intent of the FCT Program and the FCT proposal process, as well as being a user guide for sponsoring organizations in the Department of Defense to nominate projects each year.

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The handbook provides the necessary guidelines, examples, and points of contact. In general, the handbook focuses on four areas:

- 1) The intent of the FCT Program.
- 2) The FCT proposal process and selection criteria.
- 3) Roles, responsibilities, and contributions various organizations and persons play in the FCT Program.
- 4) Examples to aid a potential sponsoring organization in preparing a FCT candidate proposal.

FCT PROGRAM THRUSTS

The FCT Program must adjust to the prevailing defense budget environment to remain successful. Thrusts intended to ensure the FCT Program remains viable include:

- 1) Recognizing FCT as an acquisition oriented program.
- 2) Involving the warfighter/user up front.
- 3) Instilling more discipline in the FCT selection process by funding projects which have the highest probability of procurement assuming a successful evaluation.
- 4) Holding sponsoring organizations accountable for FCT project management and project execution.
- 5) Using the Integrated Product Team concept as mandated by Department of Defense Directive 5000.1.

HANDBOOK FRAMEWORK

The handbook goes from the general to the specific. The chapters and appendices cover the major actions and players necessary to accomplish a successful FCT. The chapters are organized as follows:

Chapter 1 discusses the FCT Program's intent and provides a description of the FCT Program.

Chapter 2 is required reading for industry and government persons contemplating or pursuing FCT project funding. This chapter identifies and describes the areas critical to achieving FCT project approval. An understanding of the philosophy presented in this chapter will assist a sponsor in properly preparing the FCT proposal format found in Appendix A.

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Chapter 3 addresses participants and responsibilities. This chapter discusses the variety of organizations and individuals and their functions routinely involved in the FCT Program. This chapter also provides a basis for determining who from foreign industry, foreign government organizations, and Department of Defense organizations should be included on the Integrated Product Team for an FCT project.

Chapter 4 addresses project management and provides project managers of approved FCT projects with methods and techniques for success. Cost, schedule, and project performance are discussed to ensure the Department of Defense's expectations are understood.

Chapter 5 discusses FCT project testing and evaluation approaches. The ideas presented in this chapter are offered to stimulate cost effective testing and evaluation approaches.

Chapter 6 focuses on procurement—the underlying tenet of the FCT Program. This chapter offers concepts to enhance procurement potential.

Chapter 7 describes the reports and reporting requirements of the FCT Program.

The appendices contain specialized charts, examples, and information designed to illustrate and amplify the documentation and reports discussed in the handbook. A sample proposal is included and other information to help a sponsoring organization prepare a FCT proposal.

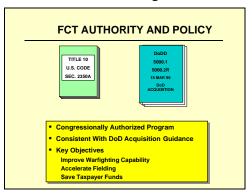
FCT HANDBOOK OVERVIEW

CHAPTER 1 FOREIGN COMPARATIVE TESTING (FCT) PROGRAM OVERVIEW

This chapter provides an overview of the FCT Program. The sections of this chapter correspond to and summarize the remaining chapters of the handbook.

FCT AUTHORITY AND POLICY

The roles and missions of the U.S. Armed Forces come from several related but distinct documents — one being the U.S. Code and another Department of Defense Directives (DoDDs).

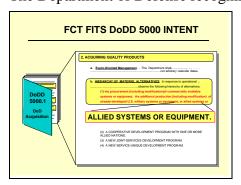


Under the U.S. Constitution, authority to create and maintain armed forces is provided to the U.S. Congress. The U.S. Code, in particular Title 10 "Armed Forces," is the current legislation implementing the Constitutional authority provided to Congress for the creation and maintenance of armed forces and is national law. DoDDs issued by civilian authorities in the Department of Defense establish policy or order specific actions and have the force of law. Authorized in 1989, the FCT Program is congressionally mandated by Title 10, United

States Code, Section 2350 (g) and receives separate funding in Program Element 0605130D contained in the Office of the Secretary of Defense Test, Systems Engineering and Evaluation Budget. Current contracting guidance relevant to the FCT Program is found in Part 211, Department of Defense Federal Acquisition Regulation Supplement and sections of Department of Defense Regulation 5000.2-R which address the acquisition and distribution of commercial products.

FCT SUPPORTS ACQUISITION REFORM

The Department of Defense recognizes the imperative to do business smarter, more efficiently



and effectively if it is to maintain the necessary level of readiness demanded of America's Armed Forces. This requirement is especially true in the manner by which the United States procures equipment for the military. This philosophy is captured in DoDD 5000.1, the acquisition directive on how the Department of Defense will acquire material for the U.S. Armed Forces. The directive sets the **first priority** for providing a material solution to satisfy validated requirements or correcting mission area shortfalls as the **use or modification of existing commercially developed or <u>allied systems</u> that foster a nondevelopment**

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acquisition strategy.1

PROGRAM INTENT AND PRINCIPLE ACTIVITY

The **intent** of the FCT Program is to leverage nondevelopmental items of our allies and friends in

order to satisfy valid defense requirements more quickly and economically. Nondevelopmental items are characterized as previously developed items—whether developed for a commercial or military market—that are ready to use with minor or no modification.

The FCT Program's intent is to leverage foreign nondevelopmental items to satisfy valid U.S. defense requirements more quickly and at best value.

The <u>principle activity</u> of the FCT Program is to test and evaluate foreign nondevelopmental items nominated by a sponsoring organization (Army, Navy, Marine Corps, Air Force, U.S.

The FCT Program's principle activity is testing and evaluating foreign nondevelopmental equipment that has potential to satisfy sponsor requirements.

Special Operations Command) to determine whether these items satisfy U.S. military requirements or address mission area shortcomings. The focus on satisfying the sponsoring organization's requirements is fundamental to the FCT Program's success. The premise of the FCT Program is that the sponsoring

organization will procure an item if it passes the test and provides best value. Since only U.S.

Special Operations Command and the Services have funding to purchase an item after a successful FCT, it is essential that an article tested in the Foreign Comparative Testing Program satisfy their requirements. The FCT Program Office has no requirements and receives NO procurement money to purchase any item(s) after a successful FCT: only sponsoring organizations receive money from Congress to purchase items after a successful FCT evaluation.

The premise of the FCT Program is that the sponsoring organization will procure an item after a successful evaluation.

PROGRAM OBJECTIVES

FCT Program objectives are to improve the U.S. warfighter's capabilities and reduce research, development, test, and evaluation expenditures through:

- Rapid fielding of quality foreign nondevelopmental military equipment.
- Eliminating unnecessary duplication of research, development, test, and evaluation.
- Reducing life cycle or procurement costs.
- Enhancing standardization and interoperability.
- Improving cooperative support.

¹ Ref: Department of Defense Directive 5000.1 D. (POLICY), 2. (ACQUIRING QUALITY PRODUCTS) b. (Hierarchy of Material Alternatives).

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• Promoting competition.

THE FCT PROCESS

Overview

Generally, the first step in the FCT process begins with the identification of a world class foreign nondevelopmental item that may have potential for use by the U.S. military. The item may be identified by any number of methods: U.S. market investigations; foreign vendor marketing; a U.S. military user seeing a viable foreign item; observation of a foreign item or state-of-the-art technology at military conventions or conferences; targeted searches for materiel to satisfy urgent military requirements; or vendor demonstrations to military users, materiel acquisition professionals in the Department of Defense, or high level military personnel.

The second step in the FCT process is matching a potential FCT item with a valid military requirement. Since the FCT Program evaluates items to satisfy user requirements, if a user has no validated requirement for an item, FCT funds will not normally be provided.

After identifying a foreign item of interest and a validated requirement, the third step in the process is to determine

The FCT process is dependent on a world class foreign item, user interest in the item, a valid requirement, and good procurement potential.

procurement potential. Unless there is sufficient interest in procuring and fielding an item after a successful evaluation, there is little reason to conduct an FCT project.

Given these three steps—world class foreign item, validated requirement, and procurement potential, the next step will usually be for an acquisition representative (i.e. the sponsoring organization's project manager responsible for providing material solutions to satisfy user requirements) to convene an Integrated Product Team. This team begins development of a proposal for an FCT project. Once the draft FCT proposal is completed, it is forwarded through Service or U.S. Special Operations Command channels to the FCT Program Office.

The FCT Program Office normally receives draft project proposals in late fall and final project proposals in mid-winter. After discussions with the sponsoring organizations in late spring and selected briefings in the early summer, the FCT Review and Selection Committee meets to prioritize proposals and allocate anticipated FCT funding to the highest priority proposals.

In late summer, notification letters are sent to Congress listing individual projects which the FCT Program intends to fund. At the end of the 30 day Congressional notification period — if there are no objections from Congress, and the budget is approved, sponsoring organizations are provided FCT funding to obtain, test, and evaluate items for their approved FCT projects. While most FCT projects are funded for no more than two years, complex equipment or tests of sophisticated systems can be funded for longer periods. Chapters two through seven provide additional information on the FCT process.

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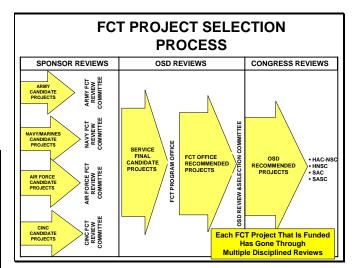
Annual FCT Cycle

The FCT Program Office has defined an annual cycle for receiving and processing Service and U.S. Special Operations Command "in-cycle" FCT proposals. The "in-cycle" calendar begins in December with receipt of Service and U.S. Special Operations Command draft FCT proposals. The cycle ends the following October after the final projects selected for funding have been sent to Congress, and the FCT funds are provided to the sponsoring organizations to execute approved projects.²

Nomination Review and Selection Process

The Services and U.S. Special Operations Command have internal FCT activities which precede formal submittal of projects to the FCT Program Office In general, there is an interactive and cooperative process among the user/operator, the vendors, and the respective FCT Offices at the Service-level to match items that





appear to meet the users' needs with validated requirements. After appropriate Service-level activities, the sponsoring organization prepares a FCT proposal that addresses the procurement potential of the proposed item. The thoroughness and accuracy of the process to prepare the FCT

proposal provides a foundation for a successful FCT project.

The FCT Program Manager is assisted throughout the year by representatives from various organizations in the Department of Defense.

These organizations assist in reviewing and recommending projects for FCT funding. Additionally, special assistance may be provided when unique situations arise or unusual circumstances occur. The responsibilities of the FCT Review and Selection Committee are listed in more detail in Chapter 3, FCT Program Participants and Responsibilities.

² The FCT Program Manager will inform the Services and U.S. Special Operations Command of the exact dates during the annual cycle when proposals and other information are due or when meetings such as Review and Selection Committee meetings will occur.

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Out-of-Cycle Proposals

It is understood that worthy FCT proposals surface during the year which do not synchronize with the "in-cycle" process. For this reason, "out-of-cycle" proposals are accepted by the FCT Program Manager from the Services and U.S. Special Operations Command at any time of the year. Execution of "out-of-cycle" proposals is generally dependent on FCT funding becoming available from slow executing or canceled FCT projects. While historically a few FCT projects will be terminated during the year, there is no assurance cancellation will occur; nor is there any way to anticipate the amount of funding that may become available to initiate "out-of-cycle" new start projects. In fact, unobligated funds from previous years are always subject to scrutiny by Congress and are vulnerable to recall. Therefore, funding for "out-of-cycle" proposals is much more problematic than for approved "in-cycle" projects. Even so, "out-of-cycle" proposals should be thorough and accurate and demonstrate the proper coordination and Integrated Product Team involvement.

FCT PROGRAM PARTICIPANTS

There are numerous "interested parties" involved in the FCT process, and Chapter Three discusses the roles and responsibilities various organizations and selected individuals play in executing the FCT Program. The "interested parties" can be divided into four groups that have major roles in some or all phases of the FCT Program: (1) the U.S. Congress, (2) Department of Defense organizations, (3) foreign vendors and their U.S. partners, and (4) foreign government organizations.

Congress

The Congress of the United States is constitutionally responsible for the authorization and appropriation of money. In discharging this responsibility with regards to the FCT Program, Congress exercises both a budgetary and an oversight function. The FCT Program exists as a result of specific legislation; therefore, the Congress examines the conduct of the Program to ensure it is complying with the intent of the law. More specifically, in instances where Congress has prohibited the expenditure of funds for certain types of testing or procurement, Congress watches to ensure that FCT projects do not violate Congressional direction. In addition to oversight, Congress approves (or rejects) each FCT project. The FCT Program in general and selected FCT projects individually have high visibility in Congress.

Department of Defense

³ Information on specific activities and dates can be obtained directly from the Services or U.S. Special Operations Command by e-mail, through the Services' World Wide Web addresses, or by calling the FCT focal point in a particular Service or at U.S. Special Operations Command (for all the foregoing see point of contact information on the **Office of the Secretary of Defense** FCT Homepage referenced in "How to Use This Handbook" on page i).

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Within the Department of Defense, multiple organizations are involved in the FCT Program. Major players include the Office of the Secretary of Defense, the sponsoring organizations, and the users/warfighters.

FCT Organization

The FCT Program is administered by the U.S. Department of Defense in the Office of the Under Secretary of Defense for Acquisition and Technology, Director, Test, Systems Engineering, and Evaluation; and Defense Security Cooperation Agency, Policy. The FCT Program Office provides oversight of Service and U.S. Special Operations Command execution of funded FCT projects.



Sponsoring Organizations

The Army, Navy (including the Marine Corps), Air Force, and the U.S. Special Operations Command sponsor and implement individual FCT projects. Each of these sponsoring organizations has slightly different approaches to handling the FCT Program. However, the responsibilities for planning, executing, monitoring, and reporting to the FCT Program Office are essentially the same. In general, there is an office that is responsible for the FCT Program at the senior staff level in each sponsoring organization. Within each sponsoring organization, there can also be FCT points of contact at the major commands and organizations that are involved either in the proposal process or in the testing and evaluation of foreign items.

The Services and U.S. Special Operations Command nominate projects for FCT funding based on requirements or mission area shortfalls identified by the user/operator/warfighter. There are many competing requirements, and it is the responsibility of the Services and U.S. Special Operations Command to prioritize their yearly FCT proposals and identify sponsor organization dollars for procurement.

Users/Warfighters

The users/warfighters play the most significant role in the FCT process because they determine the requirement for an item and are also the ultimate beneficiary of the Program. The user relies on the material developer to find the best and most rapid solution to their needs. Users must be involved in the FCT process from the beginning and must be included on the Integrated Product Team. User involvement helps define key performance parameters and ensures that the item(s) being tested is what is wanted.

Foreign Vendors and U.S. Partners

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Foreign vendors' products are what makes FCT possible. Without the foreign nondevelopmental item, there would be no FCT Program. While there are other ways foreign products can be tested or acquired by the Department of Defense, vendors with nondevelopmental items normally enter the FCT world either through marketing their products after having identified user interest or in response to a sources sought announcement (Requests for Information and Requests for Proposals) from the sponsoring organization.

During the course of a foreign vendor's routine activities with the Department of Defense, opportunities to interest U.S. military users/operators in their products may arise. If, after

holding discussions with potential users and operators, a vendor senses interest in their product, the **vendor** should suggest to the user/operator that the FCT Program can provide the sponsoring organization with funds to test and evaluate foreign items. Similarly, vendors need to watch for Requests for Information and Requests for Proposals in the Commerce Business Daily (available on the World Wide Web at locations such as http://cbdnet.access.gpo.gov/) to identify opportunities to make the Services and U.S. Special Operations Command

VENDOR WARNING!

DO NOT
ASSUME
SPONSORING
ORGANIZATIONS
KNOW ABOUT
FCT!

aware of nondevelopmental items that could potentially satisfy needs. Vendors should remember that the goal of the FCT Program is procurement of an item after successful test and evaluation. Therefore, it is in the vendor's best interest to communicate openly and to be an active participant in the FCT Integrated Product Team process. Vendors who assume military users, operators, or sponsoring organizations know about and understand the FCT Program have made a poor assumption.

An avenue some foreign vendors pursue to strengthen their marketing efforts is industrial teaming. Also, U.S. prime contractors often seek teaming arrangements with foreign vendors for

There is no requirement nor FCT selection criteria related to either teaming or U.S. production of foreign items.

items having market potential in the United States. These business arrangements include work-sharing or perhaps U.S. production of a foreign-developed item under license. While teaming can lead to long-term industrial relationships or provide each partner a

presence in the international market, there is no FCT requirement nor selection criteria related to either U.S. teaming or U.S. production of foreign items.

Foreign Government Organizations

The primary foreign government organizations that have a visible role in the FCT Program are foreign embassies and foreign defense attachés. Usually a representative from the Defense Attaché office or a representative from the diplomatic section that handles industrial and economic issues will monitor the progress of FCT projects for vendors from their nation. Embassy points of contact play an important role as liaison for coordination and also as a means

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to expedite communications and exchange information. Early involvement by foreign government organizations in the FCT process has been instrumental in many instances to overcome obstacles that threatened project success.

Some foreign government organizations also play a role as scout for their country's vendors. For example, embassy representatives are uniquely equipped through normal social, political, economic, and military contacts to become aware of FCT opportunities. Additionally, foreign military staffs that have had experience with proposed FCT items can provide valuable information to assist a sponsoring organization.

Finally, the involvement of foreign government organizations—to include senior political and defense leaders—demonstrates that the politics of FCT is out of proportion to FCT funds provided to the sponsoring organization. Records show procurements from the FCT Program can be substantial. Senior foreign leader interest indicates that the FCT Program plays an important role in strengthening international armaments cooperation.

MANAGEMENT AND PROCUREMENT

Winning Strategy

Normally, FCT proposals begin with a foreign vendor and a potential U.S. military user/operator getting together to determine if there is Service or U.S. Special Operations Command interest in the vendor's product. If sufficient user advocacy for a particular foreign item exists, a sponsoring organization will convene an Integrated Product Team to develop a draft proposal for an FCT project. The foreign vendor(s) will normally be a part of this initial team. The Integrated Product Team leader must ensure that proprietary vendor information is not divulged to other vendors during these initial discussions.





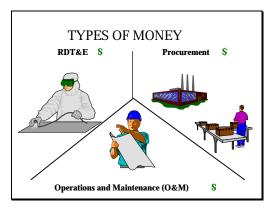
The Integrated Product Team must determine if there is a validated requirement (a formal, validated Mission Need Statement is essential, an Operational Requirements Document is highly desirable), if sponsor procurement funding is available in the amount and timeframe needed to procure the tested item after testing, and if a market investigation has been conducted. The Integrated Product Team must also determine if the foreign item being proposed for evaluation is in production, is in use by a foreign country, and offers performance and/or cost advantage.

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Types Of Money

Money provided by Congress to the Department of Defense is allocated in different categories. These different categories of money have restrictions on their use and length of availability.

FCT funds are **Research Development Test & Evaluation (RDT&E)** dollars which are legally good for only a two-year period, but Congress and the Department of Defense Comptroller



expect all funds to be obligated in the same fiscal year in which they are provided. This restriction on RDT&E funding is one of the primary reasons why the FCT Program Manager is keenly interested in a sponsoring organization awarding a contract and executing their FCT project on schedule.

Procurement money is normally required to purchase items after a successful FCT. Procurement dollars are provided to the Services and U.S. Special Operations Command by Congressional action.

Operations and Maintenance money is provided to the Services and U.S. Special Operations Command by Congress to support routine operating and maintenance expenditures. In certain situations, operations and maintenance money belonging to a sponsoring organization may be used to procure items after a successful FCT evaluation.

All FCT Integrated Product Teams must determine very early what type of funds, in what amounts, and in what years funding will be available to procure an item if the item passes the FCT and demonstrates best value. This critical determination has historically been an issue the sponsoring organizations and industry have addressed much too late. There have been cases where there was no chance for procurement because the sponsoring organization did not have procurement dollars for that project. A straight forward method to determine if procurement funds are available is to identify the Program Element the funding will come from and determine the years and amounts of the programmed funding.

If procurement funding information isn't provided in the FCT proposal, the FCT Program Manager will consider the proposal as a technical assessment—the FCT category which has the lowest priority for FCT funding.

FCT Procurement Timelines

In the past, a successful FCT generally involved two separate contracting periods. This created turmoil in the Program when an item successfully passed the FCT but was not awarded a contract for production procurement. Where there is a reasonable chance for procurement, it is recommended that the sponsoring

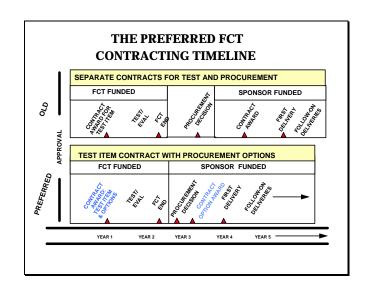
The sponsoring organization project manager must identify the Program Element the procurement funding will come from and determine the years and amounts of the funding.

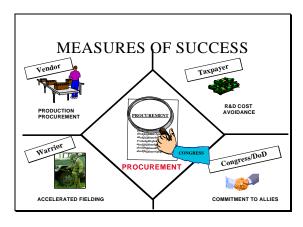
OVERVIEW FCT HANDBOOK

organizations structure their acquisition and contracting strategies so there is one contract award to obtain both the test article(s) and, if best value, the production articles. This can be accomplished through the use of contract options or by other methods discussed in Chapter 6.

FCT Measures Of Success

Neither the U.S. taxpayer nor the Department of Defense can afford to test and evaluate items simply for the sake of testing. The FCT Program benefits the United States in both tangible and intangible ways. Among the tangible benefits are savings resulting from cost avoidance in research and development, lower per unit procurement costs, and reduced life cycle costs. Savings also accrue from stimulating industrial competition. Another benefit is accelerated fielding of the item to the operators which translates into improved readiness.





An important, though intangible, benefit comes from strengthened relationships with allies and friends. FCT is one avenue that demonstrates U.S. commitment to a two-way street in international armaments cooperation.

Ultimately, the true measure of the FCT Program's success is procurement after a successful evaluation. The selection process for funding priority ranks FCT Proposals based on the probability for procurement assuming the foreign item satisfies the validated requirement(s) and provides best value.

TESTING AND EVALUATION

FCT Actual Test and Evaluation

FCT HANDBOOK OVERVIEW

The actual test and evaluation of a foreign item(s) is done by or through the sponsoring

organization. The selection of items to test, the actual test location(s), the selection of the executing test organization(s), the detailed test procedures, and the number and kinds of tests are <u>all</u> determined by the organization sponsoring the FCT proposal. The **Department of Defense** has a keen interest in cost effective testing, and therefore, both the FCT Program Office and the **Office of the Secretary of Defense** Staff review each candidate project for planned cost effectiveness before funding a project. The

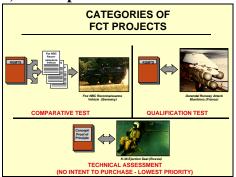


foreign vendor plays an important role in the formulation of a cost effective test plan since the intent of testing and evaluating non-developmental items is to avoid unnecessary and/or duplicative testing. A foreign vendor whose item is being evaluated has the most complete knowledge of the test and evaluation data from their internal and external developmental efforts and from prior host country tests. **Early vendor participation in the FCT proposal process before the proposal is submitted** is essential to avoid unnecessary or duplicative testing.

Categories and Types of FCT Tests

There are <u>two categories</u> of FCT Projects: **TEST TO PROCURE** and **NO PROCUREMENT INTENDED**. Within the **TEST TO PROCURE** category, there are two types of tests:

1) A comparative test is one in which multiple items are tested and evaluated against each other



and against a set of requirements. At least one of the items in a comparative test must be foreign if the FCT Program office is to provide funding. If all items in a comparative test are foreign, FCT funding can be requested for the entire cost of the test (includes lease or purchase of test articles and execution of the test and evaluation). If U.S. domestic items have been identified as candidates and there is a mixture of foreign and domestic items to evaluate, the FCT Program only provides FCT funding for costs associated with test and evaluation of the foreign

items. The sponsoring organization must provide all funds for costs associated with test and evaluation of U.S. domestic item(s).

An issue that frequently arises in a **comparative test** is the availability of sponsoring organization funds to evaluate U.S. domestic items. The sponsoring organization must identify their funding to test and evaluate

U.S. domestic items before a proposal will gain final approval. Foreign vendors should be aware

A sponsoring organization must provide <u>all</u> funds for costs associated with testing and evaluating any competing U.S. item(s)

of this stipulation as it has caused FCT projects to be canceled or delayed while waiting on sponsoring organization funding to evaluate

OVERVIEW FCT HANDBOOK

competing U.S. items.

2) A **qualification test** is one in which a unique foreign item is evaluated to determine if the equipment's capabilities match the vendor's claims. FCT funding may be requested for the entire test and evaluation costs (includes lease or purchase of test article and execution of the testing).

Within the **NO PROCUREMENT INTENDED** category, only technical assessments are conducted. While the law establishing the FCT Program allows technical assessments, FCT funding for technical assessment projects is provided on a lower priority than for projects where an intent to procure exists.

THE FUNCTION OF FCT REPORTS

The FCT Program relies on reports to reinforce accountability and to provide information about the status of a project. These reports range from those required by law such as the Foreign Comparative Testing Program's <u>Annual Report to Congress</u> to those required by regulation or policy such as periodic progress reports or test and evaluation reports. An FCT Program goal is to use reporting as a management tool for successful project execution.

CHAPTER 2

THE FCT PROPOSAL PROCESS

This chapter describes the process for nominating Foreign Comparative Testing (FCT) projects to receive funding. The Services and U.S. Special Operations Command nominate FCT projects. An FCT proposal is a formal document the sponsoring organization submits through Service or U.S. Special Operations Command channels to the FCT Program Office to request FCT funding for each specific project. The initial proposal is submitted to nominate a project and then updated annually when multiple year funds are requested. The FCT proposal provides information in determining the suitability of the project for the FCT Program, especially concerning the procurement potential of an item. This emphasis on procurement underscores the FCT Program's principle purpose as a path to procurement.

The information required to complete an FCT proposal and the reasons why the information is important are discussed below. Appendix A contains the FCT proposal format, but readers are advised to check the FCT Homepage (http://www.acq.osd.mil/te/programs/fct/) for the most current version before proceeding. ⁴

THRUSTS OF THE FCT PROPOSAL PROCESS

The FCT proposal process helps establish a success-oriented approach for an FCT project. Areas receiving increased attention include:

- A) Increasing the probability of procurement by focusing on the likely availability of the sponsoring organization's procurement funds and reviewing the sponsoring organization's acquisition strategy (and the accompanying contracting strategy) to acquire production articles assuming a successful evaluation (see Chapter 6 for discussion).
- B) Insisting on early coordination between all interested parties (sponsoring organization, contracting agency, foreign industry and their U.S. partners, foreign embassy staff, testing organizations, user representatives, program element monitors, FCT Program Office, Service FCT staff offices, etc.) through the use of Integrated Product Teams (see Chapter 4 for discussion).
- C) Using the FCT proposal evaluation criteria when evaluating a proposal (see this chapter for discussion).

⁴ An "FCT Proposal Generator and Management and Report System" software tool to assist in developing proposals and other reports related to the FCT Program is being trial fielded in 1998.

D) Shifting test and evaluation efforts away from costly and unnecessary developmental testing towards cost effective operational testing (see Chapter 5 for discussion).

HOW TO START AN FCT PROPOSAL

The first step in the FCT proposal process occurs when a user identifies a foreign vendor(s) nondevelopmental item that appears to fulfill a validated requirement or operational shortfall. Next, the user typically contacts the appropriate acquisition organization to discuss proposing the item as a project for the FCT Program. At this point, an initial Integrated Product Team (see entries in Chapters 3 and 4 concerning composition and function) is normally formed to gather information necessary for an FCT proposal. An important action of the team is the formulation of an announcement in the Commerce Business Daily to effect a market survey to determine likely contenders. An FCT proposal is then drafted by the appropriate acquisition project office with input from vendor(s) through the use of an Integrated Product Team. The proposal is then sent to the sponsoring organization's staff FCT Program coordinator for review. After successful review and approval the sponsoring organization staff finalizes and submits the final proposal as part of the annual cycle. This same sequence is followed for "out-of-cycle" submissions, the difference being that "out-of-cycle" projects are submitted at any time during the year and can only be funded if FCT funds become available from terminated or slow-executing projects.

While the procedure summarized above is relatively straight forward, in order to prepare a proposal properly, participants must understand the criteria established to evaluate FCT proposals.

EVALUATION CRITERIA

The next step in the FCT proposal process is a review by the FCT Program Office to select projects for funding. This review evaluates a proposed project against specific criteria (see chart below) to determine if the proposal qualifies for FCT. Drafters of an FCT proposal must understand the rationale behind these criteria if they are to provide the necessary information when submitting a proposal, and the best way to obtain the required information is to form an Integrated Product Team early in the process and ensure that necessary organizations are represented. Projects that most closely meet all of the criteria listed below and that have strong support from senior leaders (i.e., Flag/SES) have the best chance of selection.

Have Answers to the Following Questions:

A) <u>Is the item(s) foreign?</u> By U.S. law, FCT funding is provided only to test and evaluate foreign items. Where questions exist, a determination of the origin is necessary to ensure compliance with the law. The methodology for determining the relevant disposition of a product is found in Federal Acquisition Regulation 25 and in the Defense Federal Acquisition Regulation 225. If ambiguity still exists after referring to these regulations, a legal interpretation must be obtained by the sponsoring command.

FCT PROPOSAL EVALUATION CRITERIA

- $\sqrt{}$ ITEM IS FOREIGN
- **√** USER ADVOCACY
- $\sqrt{}$ VALID REQUIREMENT
- $\sqrt{}$ MARKET INVESTIGATION
- **VIABLE ACQUISITION STRATEGY**
- $\sqrt{}$ ITEM IN PRODUCTION
- √ FUNDS TO TEST DOMESTIC CONTENDERS
- $\sqrt{}$ IN USE BY HOST NATION
- **V** COST/SCHEDULE REALISM BENEFITS
- √ VENDOR PARTICIPATION IN FCT PROPOSAL PROCESS
- **√** LOGISTICS

B) Is there user/operator advocacy with general/flag officer level support? The importance of user advocacy for an FCT project cannot be overemphasized. The user generates requirements in the U.S. Department of Defense acquisition system, and the user must specify to their sponsoring organization staff which requirements will receive funding for procurements. The user's continuing interest in satisfying a requirement helps maintain procurement funding as the annual Service and U.S. Special Operation Command budgets get shuffled from one year to the next.

Vendors and other organizations not well versed in the Department of Defense acquisition system often mistake who is the real user/operator. Users are typically found at

Army forts, at Navy bases and ports, and at Air Force bases and airfields.

General/flag officer level support for an FCT project is important because general/flag officers are more likely to know what will be funded for procurement after a successful FCT evaluation.



A general/flag officer level letter indicating an intent to procure if FCT testing is successful adds credence to an FCT proposal. Likewise, a sponsor's inability to garner general/flag officer level support may be an early indication that there is no credible intent to procure after the FCT is completed.

Also, those at the general/flag officer level are normally in a better position to assess the availability of sponsor funding to test and evaluate any U.S. contender product(s).

Another important aspect of user advocacy is the potential of the project for joint application. The FCT proposal form specifically asks if the proposal has been shared with the other sponsor organizations and if there is any joint interest in the project. Early joint consideration avoids duplication and additional costs. When joint interest and support exist, a project is likely to have increased procurement potential and a higher probability of receiving FCT funding.

C) <u>Is there a validated requirement?</u> Since the Department of Defense uses a requirements based funding philosophy [i.e., the Department of Defense does not buy things for which it has no requirement], the importance of a validated requirement is critical to any procurement after an



FCT. Vendors wishing to make informed business decisions concerning FCT should understand the importance of the relationship between validated requirements to potential sales. Requirements are normally in the form of a Mission Need Statement (MNS) and an Operational Requirements Document (ORD). MNS describe broad requirements with no materiel solution defined. ORDs address how a materiel solution will be operationally employed to satisfy part or all of a MNS.

Vendors should obtain requirement documents to determine the probability of their product satisfying the requirement(s). Too often in the past, foreign vendors participating in an FCT were neither provided a copy of the requirements document(s) nor told there was no validated

requirement. In situations where a requirements document(s) is classified and none of the traditional methods of release is possible, the vendor should ask for the following: titles of Mission Needs Statement(s) and Operational Requirements Document(s), date the validated requirements document(s) was signed, name and rank of the signatory, and classification of the documents. Providing requirements document(s) to a

Caveat Vendor! Ask to see the requirements document.

foreign vendor(s) allows them to make informed business decisions on whether they should participate in the FCT and at what risk. Consistent with U.S. disclosure policy, foreign embassy personnel in Washington, D.C. help facilitate a transfer of such information and documents in selected instances.

If a requirements document is design based instead of performance based, the requirements document is probably not in compliance with new acquisition directives and should be viewed as suspect. The current Department of Defense policy is that requirements documents will be performance based and, as a general rule, will not contain military specifications.

D) Is there a recent market investigation? In compliance with the law, the FCT Program requires a global market investigation be completed prior to spending FCT funds. The intent is to ensure all worthy products (U.S. and foreign) are identified prior to starting an FCT project. A global market survey lessens the likelihood of a vendor coming in after an FCT project is completed. When this situation occurs, it results in a dilemma for the contracting officer. Too often, the contracting officer's decision is to do nothing and a potential



procurement is lost. Although no perfect system exists to ensure all foreign and domestic products are identified, one method which meets the criteria for market investigation is for the sponsoring organization to publish a sources sought in the Commerce Business Daily.

Vendors interested in selling products to the U.S. Government through the FCT Program should consider using the Commerce Business Daily as a primary source for identifying potential FCT

opportunities. All Federal procurement offices are required to announce in the Commerce Business Daily proposed procurement actions over \$100,000 and contract awards over \$100,000 that are likely to result in the award of any subcontracts. The Commerce Business Daily lists notices of government areas of interest, proposed government procurement actions, contract

Vendors should use the Commerce Business Daily to identify potential Department of Defense FCT opportunities.

awards, and other procurement information. A new edition of the Commerce Business Daily is issued every business day. Each edition contains approximately 500-1,000 notices divided into categories, and notices appear in the Commerce Business Daily only once. The Commerce Business Daily with information on how to use it is available on the World Wide Web (for example: http://cbdnet.gpo.gov/ and <a href="http

E) <u>Is there a reasonable opportunity for acquisition after the FCT?</u> The answer to this question is at the heart of the review and selection process. The sponsoring organization must determine the procurement potential of an item. FCT does not exist simply to fund test and

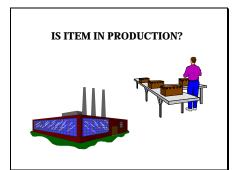
evaluations. The FCT Program is a means to an end, that end being procurement if the item meets requirements and provides best value. Therefore, the viability of a candidate project is the likelihood a sponsoring organization will procure an item that meets requirements and provides best value. Congress, the Department of Defense, foreign industry, and the foreign embassies are all interested in procurements after a successful FCT. Consequently, these organizations tend to cooperate to facilitate procurement given a successful FCT.



While each project is considered on its own merits, in general the absence of identified sponsor procurement funding (or a general/flag officer level letter of intent to obtain procurement funding) will probably result in no FCT funding for a candidate project.

Even if a proposal satisfies concerns about the availability of procurement funding after a successful FCT, a project can still flounder if the sponsoring organization does not have a sound **acquisition strategy**. Prior to formal submittal of the proposal, the sponsoring organization must consider how (sole source, full and open, options to the basic contract, etc.) the acquisition of production items will occur. Chapter 6 contains a more detailed discussion of issues relating to procurement.

F) Is the item(s) nondevelopmental? The FCT Program's focus is on testing and evaluating



foreign nondevelopmental items. Under the FCT Program, nondevelopmental items are those that are already developed and have potential military application without major modifications, regardless of whether the item is commercial or military. The FCT Program cannot be used as a substitute for research and development collaboration. For more information on nondevelopmental acquisition, see the Commercial and Nondevelopmental Item Home Page (http://www.acq.osd.mil/es/std/ndi/).

G) <u>Does the sponsoring organization have funding available to test & evaluate credible</u> <u>U.S. domestic contender(s)?</u> Since the FCT Program is not allowed by law to provide funds to test and evaluate U.S. domestic items, a sponsoring organization must provide all funding to test and evaluate credible U.S. contenders to the same requirements in the same time frame as the FCT project. Sponsor funding should be identifiable by Program Element (PE) and have the authorization and approval of the PE decision manager to test and evaluate credible domestic contenders. If sponsor funds are not available to test and evaluate domestic contenders, FCT funds will not be provided to test the foreign item(s).

H) <u>Is the item(s) in use or soon to be in use by the host nation?</u> A question that normally surfaces during the FCT review and selection process is whether a foreign article(s) proposed for FCT evaluation is in use.

An item already in use helps demonstrate the viability of the item(s) and also means there is probably data on real world use that may be leveraged for an FCT evaluation of the item.

I) Is the proposed test approach cost effective? The FCT Program cannot afford to fund projects that propose an ineffective or inefficient test approach. The test plan must recognize the differences in testing a nondevelopmental item vice a developmental



item, must leverage existing developmental and operational test and evaluation data, and must focus on testing key performance parameters early. Chapter 5 contains more information on cost-effective testing and related test and evaluation issues.

FCT projects evaluating foreign items that enhance or modify prime equipment already in the U.S. inventory must consider the remaining service life of the equipment. The probability an existing end item of equipment will be in the inventory at FCT completion and the probability the foreign item will be available for integration at the necessary time becomes a deciding factor during the FCT review and selection process. Service policies restricting expenditure of Service funds to upgrade prime equipment nearing the end of its service life must be considered before proposing a project.

J) <u>Is there evidence of foreign vendor participation in the FCT proposal development?</u> An area of keen interest to the FCT Program Manager is whether foreign vendors have been offered an opportunity to participate in the development of the FCT proposal. Foreign vendors can provide key information to include identifying existing test data, general leasing or purchasing costs, and hardware availability.

Vendor participation is generally defined as: 1) each vendor(s) is aware of the proposed FCT project; 2) the vendor has been asked to identify and discuss testing the vendor has already conducted, participated in, or is knowledgeable about; 3) the vendor has been asked for test article availability, general pricing information, 4) vendor interest in sharing the risks has been discussed (i.e.: no cost loan of the test item, reduced cost loan of the test item, vendor service and support participation); 5) the vendor has seen the proposed



approach the sponsoring organization intends to use for the FCT project; and 6) the vendor has been provided an opportunity to offer feedback to enhance or add realism to the proposed FCT project. Early vendor participation saves time, cuts program risk, and avoids costly retesting of the foreign item.

K) <u>Are logistics considerations being addressed?</u> An area that often gets overlooked is the availability and cost of logistics support. Once a foreign piece of equipment is fielded by U.S. forces, the maintenance concept must be identified. This includes maintenance level of support, availability of spares, repair parts, use of contractor maintenance support, etc. These are some of the areas that need to be addressed when evaluating the proposals.

ESTIMATING FCT BENEFITS

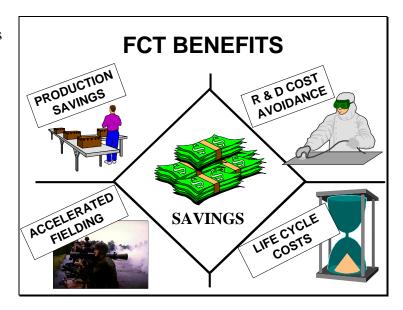
An important consideration in the FCT selection process is the potential benefits of the project if it results in a procurement. There are multiple benefits including:

• Cost avoidance in U.S. research, development, test and evaluation (RDT&E): Avoiding U.S. research and development costs by procuring an off-the-shelf foreign item is one such benefit. Every FCT project that leads to production procurement has the advantage of avoiding RDT&E costs had a U.S. sponsored development occurred. Estimating the RDT&E "savings" can be accomplished by several methods including: determining what it cost the U.S. Government to fund a similar U.S. developmental project(s) in the past, asking the foreign vendor how much they spent in developing the foreign product, or using cost estimating relationships.

• Production costs savings:

Foreign nondevelopmental items can be less expensive per unit than items in the inventory. If there are savings per item, this unit cost savings during production should be accounted for in addition to the RDT&E cost avoidance.

Life-cycle cost savings: Many
 FCT projects result in reduced
 life cycle costs for an end item.
 Life cycle savings should be
 accounted for in addition to
 RDT&E and per unit production
 costs.



• **Reductions in fielding time**: A foreign item already in production can be put in the hands of the Armed Forces more quickly than a product developed from scratch. An estimate of the time saved helps define a benefit of an FCT project.

There are other benefits perhaps less tangible. For example, fielding certain equipment that has the potential to save lives such as the Digital Flight Control project. This FCT solved the Navy's number one safety of flight issue with the F-14 Fighter.

In general, an FCT project proposal should be able to demonstrate cost avoidance/savings in one or more areas. This information is of specific interest to Congress.

CONCLUSION

Properly answering the above questions requires gathering and screening key information. It seems difficult, if not impossible, to put together an accurate and convincing FCT proposal without the FCT sponsor convening an Integrated Product Team early in the proposal development process. The more effort put in at the beginning of the proposal process to ensure that the evaluation criteria are met, the better the opportunity for a project to be selected.

CHAPTER 3

FCT PROGRAM PARTICIPANTS AND RESPONSIBILITIES

Success in the FCT Program results from proper management of an FCT project that leads to procurement if an item passes the test and provides best value. Key to achieving this success is knowing the necessary participants and understanding their respective roles and responsibilities in the FCT Program. This understanding contributes to better cooperation and coordination which in turn creates a synergy conducive to success. The diverse FCT community includes the Congress; Department of Defense organizations such as the Office of the Secretary of Defense, U.S. Special Operations Command and the U.S. Military Services' active, guard and reserve components; foreign government organizations; and foreign and U.S. industries and their industry associations.

In simple terms, these participants interact as follows: an operational user (warfighter) identifies a requirement for a capability that is not presently satisfied; that requirement is validated, and a project manager from a sponsoring organization's (Army, Navy and Marines, Air Force, or U.S. Special Operations Command) acquisition community is tasked to provide a materiel solution (i.e. an item of equipment) to satisfy the requirement; the project manager decides on a nondevelopmental solution and proposes a test and evaluation that includes foreign items; after review by the Office of the Secretary of Defense, proposed projects are selected to receive FCT funds; the test and evaluation is conducted by the project manager and if the foreign item passes the test and provides best value, sponsoring organization funds are used to procure production quantities of the foreign item.

This chapter provides general information on roles and responsibilities of the key individuals and organizations in the FCT Program. The information presented is necessarily abbreviated and is intended only for an appreciation of the coordination necessary to achieve 1) a funded proposal and 2) a successful FCT. This chapter serves as a general guideline on how each of the participants is involved in the FCT process. Additional information is available from FCT offices in the sponsoring organizations which can provide details on which participants are likely to be involved in a particular FCT project. Below are some participants whose FCT responsibilities are summarized in this chapter.

- Acquisition Executive (Service or U.S. Special Operations Command)
- Congress
- Contracting Officer (U.S. Government)
- Defense Contracting Management District-International (DCMD-I)
- Defense Finance Accounting Service
- Director, Test, Systems Engineering, and Evaluation
- FCT Office/Program Manager
- FCT Office in the Services/U.S. Special Operations Command
- FCT Program Review and Selection Committee
- Foreign Embassies in United States
- Integrated Product Team
- Laboratory in the U.S. Department of Defense
- Material Developer
- Office of Defense Cooperation (ODC)
- Office of the Secretary of Defense Staff

- Program Element Monitor (PEM)
- Program Executive Office (PEO)
- Project Manager (Sponsoring organization)
- Resource Sponsor
- Requirements Sponsor
- Sponsoring Organization
- System Program Office (SPO)
- Test Organization (U.S. Department of Defense)
- Under Secretary of Defense (Acquisition and Technology)
- U.S. Embassy Representatives
- User
- User Advocate
- Vendor (Domestic)
- Vendor (Foreign)
- Vendor Representative
- Warfighter

The roles of the participants should not be considered in isolation but as part of a system that must work together. The need for coordination underscores the Department of Defense's emphasis on the use of Integrated Product Teams in the FCT process.

Acquisition Executive (Service or U.S. Special Operations Command)

The individual having overall acquisition management responsibilities in each Service or U.S. Special Operations Command. Among other responsibilities, the Acquisition Executive:

- Provides highest level acquisition oversight within the Services or U.S. Special Operations Command.
- Insures that FCT projects are consistent with sponsoring organization acquisition strategies.
- Influences allocation of procurement funds.

Congress

Annually authorizes and appropriates money for the FCT Program. In regards to the FCT Program, Congress:

• Can elect to fund all, none, or some of the nominated projects and enact restrictive legislation that limits or directs the FCT Program.

- Maintains oversight of the overall FCT Program and monitors high-visibility FCT projects through appropriation and authorization committees.
- Requires an Annual FCT Report to Congress.
- Routinely makes inquiries on specific FCT projects.
- Monitors the procurement ratio of the FCT Program.

Contracting Officer (U.S. Government)

A contracting officer awards the contract to the foreign firm(s). Contracting officer responsibilities include:

- Being knowledgeable of Office of the Secretary of Defense directives/correspondence relating to the FCT Program.
- Participating early in the development of the FCT acquisition strategy and contracting strategy with particular attention to production procurement expectations.
- Ensuring FCT sources sought notices specifically include provisions specifying non-developmental items.
- Participating in FCT Integrated Product Teams for active or potential projects.

Defense Contract Management District — International (DCMD-I)

This Department of Defense funded command has offices located worldwide and is responsible for ensuring foreign contractor compliance with cost, delivery, technical, quality, and other terms of a contract. Services include:

- Contract management including post award conferences, administering payments, negotiating modifications, termination and close out activities.
- Quality assurance monitoring of contractor processes for areas including but not limited to warranty items, measuring and test equipment, first article processing, and records.
- Program and technical support services such as coordination of cost/schedule control systems criteria, pre-award surveys, and monitoring of the contract's progress.
- Safety and environmental compliance services with contract and development of contract specifications, adequacy of safety specifications, recommending approval/disapproval of waivers.
- Host country transportation and movement advice and assistance.

The Defense Contract Management Command's homepage (http://www.dcmc.dcrb.dla.mil/) provides additional information on their mission, functions and capabilities.

Defense Finance and Accounting Service (DFAS)

The Services' accounting systems are being centralized under a common Department of Defense to streamline the costing procedure. When centralization is complete, the FCT Program should benefit along with Service, CINC, and other Department of Defense programs in relation to funding obligation and expenditure status. The DFAS should:

- Provide one step billing across all Services thereby eliminating cross disbursing.
- Provide more accurate and timely billings.
- Eliminate duplication of billings' posting.
- Eliminate mismatched disbursements.
- Provide one disbursing station for common customers/recipients.
- Prevent potential forward funding.
- Ensure proper charging to appropriations.

Director, Test, Systems Engineering, and Evaluation (DTSE&E)

The Director is under the Office of the Under Secretary of Defense (Acquisition and Technology) and has oversight for the FCT Program Office. Responsibilities include but are not limited to:

- Accounting to the Under Secretary of Defense (Acquisition and Technology) for FCT Program.
- Directly supervising the FCT Program Manager.
- Responding to Congressional inquiries on the status of FCT projects and funding.
- Chairing the Office of the Secretary of Defense FCT Review and Selection Committee.
- Forwarding the FCT Annual Report to Congress to the appropriate Senators and Representatives.
- Approving shifts in FCT project budgets and timelines that exceed baseline thresholds for the Services and U.S. Special Operations Command.

FCT Office/Program Manager

Focal point for FCT matters within the Office of the Secretary of Defense. Manages the FCT Program for the Office of the Secretary of Defense. Responsibilities include:

- Ensuring FCT projects under the Program are consistent with the policies and principles articulated in Department of Defense Directive 5000.1 and Regulation 5000.2.
- Providing assessment of Program status and risk to higher authorities and to the user or the user's representative.
- Briefing and providing recommendations to the FCT Program Review and Selection Committee concerning new start, continuing, and out-of-cycle FCT project proposals.
- Organizing and hosting the FCT Program annual Kick-Off meeting.
- Directing periodic offsite training meetings to foster joint cooperation and understanding of the FCT Program.
- Briefing Congress, foreign embassy representatives, and others as necessary on the status of the FCT Program.
- Preparing FCT input for the President's budget submittal.
- Justifying FCT funding requests to Congress.

- Managing the Office of the Secretary of Defense level FCT Proposal selection process.
- Preparing and coordinating Congressional Notification Packages.
- Publishing the Annual FCT Report to Congress.
- Establishing and publishing FCT policy and procedures.
- Establishing and fostering an environment to facilitate successful FCT projects.
- Coordinating FCT financial activities at the Office of the Secretary of Defense level.
- Fostering a joint approach for the FCT Program.
- Assisting the current and potential FCT community by providing information and assisting information exchange.
- Participating in FCT related diplomatic and Congressional activities.
- Participating in or supporting FCT Integrated Product Teams.
- Educating and updating the FCT community on acquisition and policy matters affecting the Program.
- Responding to Congressional and media inquiries.
- Conducting on site visits to determine project progress.

[The FCT Office Homepage is located at http://www.acq.osd.mil/te/programs/fct/ on the World Wide Web.]

FCT Office in the Services/U.S. Special Operations Command

Principal focal point for FCT matters within each Service or U.S. Special Operations Command. Responsibilities include:

- Reviewing FCT proposals to ensure that required information is provided.
- Providing FCT Program briefings and information to users and their potential sponsoring organizations.
- Directing foreign vendor/embassy representatives to the appropriate project manager or Program Element Office.
- Selecting and prioritizing candidate projects for nomination to the Office of the Secretary of Defense.
- Ensuring candidate projects are coordinated with appropriate offices within other Services or U.S. Special Operations Command for possible joint interest in candidate projects.
- Ensuring candidate projects have been coordinated with and approved by the appropriate office or agency having oversight for the functional area.
- Establishing and fostering an environment to facilitate successful FCT projects.
- Coordinating and resolving FCT funding activities.
- Reviewing FCT reports and documents for accuracy and consistency.
- Participating as a member of FCT Integrated Product Teams.
- Participating in FCT related diplomatic and congressional activities.
- Providing information to the current and potential FCT community and facilitating the exchange of information within the community.

- Providing timely and accurate input to the Office of the Secretary of Defense for reports, documents, and inquiries.
- Supporting Office of the Secretary of Defense FCT activities.
- Conducting on site visits to determine project progress.

FCT Program Review and Selection Committee

This committee consists of representatives from the Office of the Secretary of Defense staff and the Joint Chiefs of Staff who have functional expertise and responsibilities related to test and acquisition of foreign equipment under the FCT Program. The Committee's responsibilities include:

- Using functional expertise to evaluate FCT proposals.
- Reviewing and recommending new start and continuing FCT project nominations from the Services and U.S. Special Operations Command for FCT funding.
- Reviewing and recommending FCT out-of-cycle project proposals for FCT funding.

Foreign Embassies in the United States

Foreign Embassy support and involvement in FCT varies from country to country. Similarly, each embassy's capabilities vary greatly. In general, foreign embassies contribute to the FCT Program by providing advice and information to FCT participants. Embassy assistance can include:

- Helping coordinate international loan and data exchange agreements.
- Accompanying their vendors on visits to the Department of Defense, the senior level staff at the Services and U.S. Special Operations Command, and Program Executive Office level meetings.
- Participating on a voluntary basis as a member of applicable FCT Integrated Product Teams.
- Alerting their vendors to potential FCT opportunities.
- Alerting Service and U.S. Special Operations Command personnel about foreign nondevelopmental items which may satisfy U.S. requirements.

Integrated Product Team

The Integrated Product Team serves as a management tool that helps from project inception to completion. In FCT, the Team may change composition over time but includes representatives of all organizations and activities necessary to make plans and decisions related to project cost, schedule, and performance. In particular, an FCT Integrated Product Team will include the foreign vendor and the FCT Program Manager. Responsibilities include:

- Providing information for an accurate FCT proposal.
- Helping design a cost effective test plan.
- Determining key performance parameters and critical issues.
- Identifying problems and determining solutions to keep projects on track.

• Informing the project manager of anything that affects project schedule such as cost, performance, politics, or procurement potential.

Laboratory/Lab (U.S. Department of Defense)

Labs in the Department of Defense are normally not a procuring activity and do not normally have funds for production procurements. Labs in the FCT environment normally:

- Provide technical advice to sponsoring organization project managers and selected user/operators.
- Participate as members of the FCT Integrated Product Team when appropriate.

Materiel Developer

Also referred to as a Program Element Office, Systems Program Office, Program Manager, Program Office, or Project Office.

Office of Defense Cooperation (ODC)

Defense Cooperation in Armaments (DCA) personnel are located in the Security Assistance Organizations, in some cases referred to as the Office of Defense Cooperation (ODC), in the host countries. DCA is an organized effort by the Department of Defense to promote international cooperation in armaments programs. In general, DCA/ODC personnel in a foreign country can perform activities such as:

- Providing information regarding U.S. requirements and U.S. acquisition programs to the host country.
- Serving as interface for Government-to-Government, Government-to-Industry, and U.S. industry-to-host country industry contact and coordination.
- Identifying FCT opportunities to the host country.
- Serving as Integrated Product Team members.

Office of the Secretary of Defense Staff

The staff consists of the offices/organizations under the Office of the Secretary of Defense that have responsibilities related to the FCT Program. See entry for FCT Program Review and Selection Committee.

Program Element Monitor (PEM)

Air Force term for the person who controls a Program Element containing Air Force procurement funds. The Program Element Monitor:

- Provides money to the project manager to procure foreign items after a successful FCT.
- Validates the availability of Air Force research, development, test and evaluation funds for test and evaluation of competing U.S. items (if any).

- Validates the availability of Air Force procurement funds for item acquisition following a successful FCT test.
- Participates as an Integrated Product Team member.

Program Executive Office (PEO)

An office assigned by the senior acquisition executive in a Service or U.S. Special Operations Command to oversee a group of projects (including FCT projects in that group). The Program Executive Office is normally directed by a general officer or senior executive service civilian. If a vendor has issues that are not being addressed or considered at the individual project level, grievances would normally be brought to the attention of the Program Executive Office. The PEO responsibilities include:

- Monitoring the status of projects and receiving reports from project managers.
- Ensuring that FCT projects are managed with an eye toward procurement.
- Serving as the decision authority for assigned projects.

Project Manager (Sponsoring Organization)

The sponsor FCT project manager is the principal player for each FCT project. Normally, the FCT project manager works in a Program Element Office or under a chartered Project Manager. Responsibilities of the FCT project manager include, but are not limited to, the following:

- Interfacing with the operational user on potential FCT projects.
- Establishing and running the FCT Project Integrated Product Team(s).
- Deciding the FCT acquisition strategy and supporting contracting strategy; developing cost estimates and evaluation of alternatives.
- Developing and submitting the FCT proposal to the Service-level FCT office.
- Determining test location(s), test and evaluation organizations, test schedule, and costs.
- Planning for release of the test report to vendor(s).
- Executing the funded FCT project consistent with the approved FCT proposal.
- Actively managing project cost, performance, and schedule.
- Submitting required reports and information on the funded FCT project.
- Notifying the Office of the Secretary of Defense of FCT project deviations along with actions needed to bring the project back within baseline parameters.
- Keeping abreast of procurement potential during all phases of an FCT project.
- Maintaining awareness of U.S. and international political sensitivities associated with their FCT project.
- Providing assessments of contractor performance.
- Executing the decision, in concert with the operational user and the materiel developer, to procure production items after a successful FCT evaluation.
- Managing the procurement process.
- Completing the project test report and disposition report in a timely manner.

Resource Sponsor

A Navy term for the individual that controls Navy funds for procurement. The Resource Sponsor responsibilities are similar to those listed under Program Element Monitor entry.

Requirements Sponsor

A Navy term for the organization responsible for documenting and validating requirements. Responsibilities include:

- Writing and staffing formal requirement documents (i.e., Mission Need Statement and Operational Requirement Document) for the Navy on behalf of the user/operator.
- Participating as member of the FCT Integrated Product Team.
- Assigning priorities based on Navy requirements.
- Formally validating Navy requirements.

Sponsoring Organization

This term refers to the organization that sponsors an FCT project to the Office of the Secretary of Defense. At present, sponsoring organizations are the Army, Navy, Marines, Air Force, and U.S. Special Operations Command. Sponsoring organizations' FCT responsibilities are fulfilled by a variety of offices and individuals. For example, see entries in this chapter for FCT Office in the Services/U.S. Special Operations Command, Material Developer, Program Element Monitor, Project Manager, Resource Sponsor, Requirements Sponsor, and User Advocate.

System Program Office (SPO)

A wing level organization responsible for managing the engineering and manufacturing development, production, modification, sustainment, and worldwide deployment of Air force equipment.

Test Organization (U.S. Department of Defense)

The organization selected by the sponsor project manager to conduct the actual FCT test and evaluation. The test and evaluation can be performed by a commercial contractor, a Service unique laboratory, or a Service test facility. Responsibilities include:

- Recommending quantifiable, objective measures to evaluate key performance parameters.
- Developing a test plan and conducting the test.
- Early reporting of failed key performance parameters.
- Providing a coordinated test report.

Under Secretary of Defense (Acquisition and Technology)

The individual having overall responsibility for acquisition and technology in the Department of Defense. The FCT Program falls under this office. The Under Secretary:

- Interacts with senior foreign government and defense representatives on issues relating to the status of FCT projects.
- Signs the FCT Program Annual Report to Congress.

U.S. Embassy Representatives (also see the ODC entry)

Various Department of Defense organizations have representatives overseas and these representatives are often located in the U.S. Embassies. These representatives are uniquely positioned to interact with foreign vendors and foreign government organizations concerning the FCT Program. U.S. Embassy representatives assist by:

- Informing host country government and industry representatives about how the FCT Program operates.
- Communicating with the FCT Program focal points in the Services, U.S. Special Operations Command, and the Office of the Secretary of Defense as necessary to resolve host country concerns.
- Working with foreign industry to identify potential FCT items.

<u>User</u>

The user is the individual or organization that has an operational need to meet or improve mission requirements. The user is normally located with their equipment. User responsibilities include:

- Identifying needs and initiating the process to validate a requirement.
- Working with the organization responsible for writing and obtaining formal approval of a requirement on behalf of the user/operator.
- Identifying user interest in a vendor's product.
- Sharing information with the vendor(s) on potential methods of use for the vendor's product through direct discussions with the vendor(s).
- Establishing key performance parameters in conjunction with the FCT project manager.
- Participating in determining what testing is necessary to evaluate an item properly.
- Participating as a member of FCT Integrated Product Team.

User Advocate

A term used by the Army and Navy for organizations that formally document a requirement. In the Army, the Training and Doctrine Command normally fulfills this function. For the Navy, this responsibility falls to the office of CNO(N8). The user advocate's FCT concerns include those listed under the entry for Requirements Sponsor.

Vendor (U.S. Domestic)

U.S. vendors are involved in the FCT Program either as teaming partners for foreign vendors or as competitors. In teaming arrangements domestic vendors responsibilities may typically include:

- Providing information as Integrated Product Team participants.
- Informing the project manager about testing and evaluation information and data from other tests and evaluations of their foreign partner's product.

Assisting in developing a test plan.

Vendor (Foreign)

A foreign vendor's product is at the heart of the FCT Program. The foreign vendors are the source of the nondevelopmental items and their support for and understanding of the FCT Program is a key to the Program's success. Vendors responsibilities include:

- Monitoring the Commerce Business Daily for sources sought solicitations pertaining to their product(s).
- Bringing world class products to the table for FCT consideration.
- Providing information to the sponsoring organization's FCT project manager as Integrated Product Team participants.
- Informing the sponsoring organization's FCT project managers about test and evaluation information and data from other tests and evaluations of vendor product(s).
- Marketing their product to the user.
- Informing the sponsoring organization's FCT project manager about existing contracts that might already be in place to obtain test articles.
- Providing pricing and availability data.
- Understanding avenues besides FCT to sell items to the Department of Defense.
- Looking beyond the FCT effort and focusing on the production procurement phase.

Vendor Representative

May also be referred to as a consultant, advisor, etc. Provides advice and assistance to organizations and people involved in an FCT effort where their product may or is being evaluated. Some foreign vendors make a business decision to employ consultants/representatives. An <u>effective</u> representative working in FCT must:

- Understand the Department of Defense acquisition system and process necessary to get a product sold.
- Work with the user/operator to determine if there is interest in their foreign product.
- Maintain contact with the project manager.
- Identify and help resolve issues hindering the progress of a FCT proposal, execution of an FCT project, or award of production contracts after a successful evaluation.

Warfighter

A term used to refer to the users in the warfighting commands of the U.S. Armed Forces. See "User" entry for responsibilities.

CHAPTER 4

PROJECT MANAGEMENT

The job of an FCT project manager is to execute an approved and funded FCT project on time and within budget according to law and regulation. Their mission is to provide needed equipment to the warfighter while being good stewards of the taxpayers' dollars. There are three special considerations in FCT project management:

- The politics of FCT are out of proportion to the funding.
- Integrated Product Teams are essential for FCT success.
- Selected FCT issues require additional management consideration.

POLITICS OF FCT DISPROPORTIONATE TO FUNDING

Every FCT project manager must understand that the politics of an FCT project are out of proportion to the FCT dollars provided. Even small FCT projects can have high visibility in Congress and with foreign governments because potentially millions of procurement dollars are at stake.

Congressional committees working with appropriations, foreign affairs, or national security are routinely interested in what is happening in the FCT Program. This interest may be manifest in questions about funding, relations with a nation involved in FCT, a particular aspect of a project such as compliance with legislation, or concerns about the impact on jobs in the home district.

FCT projects attract the interest and attention of high ranking foreign officials. Letters are often written to members of Congress and the Secretary of Defense expressing concerns where perceived irregularities in project execution are thought to exist. Foreign friends and allies also recognize FCT as a path to procurement. When expectations of a procurement after a successful test are not realized, vendors and foreign governments want to know why. Additionally, letters are written when foreign vendors have difficulty in obtaining copies of test reports which are important business documents to them.

INTEGRATED PRODUCT TEAMS ESSENTIAL FOR SUCCESS

A key to successful FCT project management is the early use of an Integrated Product Team. Integrated Product Teams are about **teamwork**; they are committed to **success**; they are responsible for **delivering a product** to the field, to the warfighter. Integrated Product Teams bring together the right people at the right time to get the job done in minimal time

Early industry involvement is key to a successful Integrated Product Team.

and at minimal cost. Government and industry must work together to identify and resolve issues. Early industry involvement in the FCT effort, consistent with the Federal Advisory Committee

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Act, is encouraged to take advantage of industry expertise to improve the FCT proposal acquisition strategy.

The sponsoring organization's FCT project manager is usually the individual who establishes and

The sponsoring organization's FCT project manager establishes and runs the FCT Integrated Product Team.

runs the FCT Integrated Product Team. While there is no one-size-fits-all Integrated Product Team solution, one FCT approach might be structured using a single all inclusive Integrated Product Team membership. Another FCT management approach might contain multiple phases with evolving

Integrated Product Team membership. An evolving Integrated Product Team approach with tailored membership could include phases such as:

- FCT project concept phase.
- FCT project proposal preparation phase.
- FCT final project proposal phase.
- FCT project execution phase.
- Service production procurement phase.

Regardless of the approach, there are three basic tenets to which any approach shall adhere:

- The sponsoring organization's FCT Project Manager is in charge of the FCT effort.
- Integrated Product Teams are advisory bodies to the FCT Project Manager.
- **Direct communication** between the project office and **all levels** in the FCT oversight and review process is expected as means of exchanging information and building trust. This specifically means the including of the FCT Program Manager in each individual project.

FCT Integrated Product Teams are likely to have many members (see Chapter 3) and team members are often separated by distance and time which makes physically convening a meeting costly and impractical. Virtual Integrated Product Team meetings via e-mail is one means of conducting a meeting. The advantage to this approach is that it guarantees the timely dissemination of information to all members of the team. Getting information distributed has demonstrated time after time to be one of the most effective tools to help a project either avoid problems or identify problems early enough to take preventive action.

An FCT proposal will not normally be approved if it doesn't reflect the use of an Integrated Product Team. Moreover, FCT funds will not normally be released until a functioning Integrated Product Team is in place to execute an approved FCT project.

An Integrated Product Team is necessary for FCT funding.

SELECTED FCT ISSUES REQUIRE ADDITIONAL MANAGEMENT CONSIDERATION

FCT is an acquisition program and standard management practices should be used. This section highlights areas for special management consideration.

FCT Project Management Activities

Effectively managing an FCT project need not be difficult. Experience demonstrates that an FCT

TYPICAL FCT PROJECT MANAGEMENT ACTIVITIES

- Identify the validated operational requirements document and sponsor.
- Identify the procurement dollars.
- Conduct market surveys; identify candidate foreign items for FCT and potential domestic contenders.
- Convene Integrated Product Team(s).
- Releasability Issues/Disclosure
- Submit FCT proposal:

Develop the acquisition plan and contracting strategies.

Develop the test plan.

Determine resources needed.

- Execute the approved FCT project proposal.
- Provide periodic status reports.
- Provide completed test report.
- Determine and execute procurement decisions.
- Report procurement decisions and amounts.

project becomes difficult when a project manager fails to adhere to the guidelines laid out in Department of Defense directives and regulations. Dealing with foreign vendors, contract procedures, reporting requirements, and high visibility all contribute to executing a successful FCT project. One of the ways that a project manager can help the process run more smoothly is to ensure that the various FCT project management activities are considered in advance.

PROJECT MANAGEMENT

In so doing, the FCT project manager can anticipate potential problems and avoid them. The accompanying list of FCT management activities provides a good starting point for planning.

While all management activities are important

to executing a project successfully (whether or not the item itself passes test and evaluation), some activities such as identifying all viable candidates including domestic items and identifying the procurement dollars are critical to the success of other activities.

FCT Project Baselines

In accordance with Department of Defense acquisition policy, every acquisition effort—which includes all FCT projects—shall establish a project baseline to document cost, schedule, and performance objectives (desired results) and thresholds (minimum acceptable results) at project

initiation. An FCT project manager cannot manage an FCT project and report the status of the project without the regular use of a baseline to assess project progress and project risk. An essential prerequisite to making this assessment is integrating key performance parameters (see discussion in Chapter 5) into the project manager's performance baseline criteria.

Since FCT projects fall into the acquisition category, each FCT project shall specify a project baseline.

Deviations from the baseline schedule of more than three months or ten per cent of the cost must be reported to the FCT Program Manager as well as any milestone breeches. Before the project manager can proceed with any deviations, approval must be given by the FCT Program Manager through the Service or U.S. Special Operations Command FCT focal point.

Acquisition Strategy and Procurement Funding

Given the FCT Program's emphasis on procurement, developing and documenting an acquisition strategy is a key element on the FCT project manager's checklist. The acquisition strategy serves as the road map for FCT project execution from program initiation through production procurement to post production support.

Procurement funding to purchase production quantities, assuming a successful evaluation, is also a critical FCT management issue. Sponsor procurement funds must be identified in the FCT proposal. In lieu of funds in a Program Element, a general/flag officer letter promising to seek procurement funds is a necessity. Failure of the sponsoring organization to procure a foreign item that successfully passed test and evaluation and demonstrated best value can likely damage U.S. credibility and threaten the two-way street in armaments cooperation.

For additional detail on the importance of acquisition strategy and procurement funding in the FCT Program see Chapter 6 of this handbook.

Earned Value Concept for FCT

The FCT Program Office uses earned value in evaluating FCT projects' health and status. Earned value is a management technique that allows assessment of whether funds being expensed are producing the expected work progress. This information is especially valuable when planning and executing in an FCT project because tolerances on cost and schedule are tight and subject to significant high-level domestic and international scrutiny.

In simple terms, a project manager estimates how much it will cost to complete a project in a given time. This calculation provides the project's baseline value. As work on the project progresses, the project manager periodically measures the work accomplished (earned) and at what cost. This "earned" work is compared to the baseline schedule. Any difference in cost, schedule, or performance—either positive or negative—from the baseline allows a determination of the "value" of the work. For example, fifty percent of a house should have been built in six months at the cost of \$100,000. If fifty percent was built in six month at a cost of \$125,000, then there is a negative earned value of \$25,000 or 25 per cent.

The earned value concept gives an FCT project manager early indications of whether their project is conforming to the original baseline proposal. Earned value helps the project manager recognize critical programmatic issues and can raise warnings when a project should be terminated because of inability to adhere to either time or cost constraints.

For information on how earned value works see the Earned Value Homepage at http://www.acq.osd.mil/pm/ on the World Wide Web.

FCT Financial Management and Execution

The FCT Program Manager, supported by the FCT Business Manager, is responsible for the overall financial management of the FCT Program. These responsibilities entail issuing funds, requesting data, reprogramming funds, analyzing and reviewing budget estimates and actuals, and reporting to higher authorities including the Office of Management and Budget and the Congress.

Budget Formulation

FCT offices at the senior staff level in U.S. Special Operations Command and the Services are responsible for providing and justifying FCT proposal cost estimates. These estimates are the basis for development of the FCT Budget. FCT proposal cost estimates must be sufficiently refined to defend the estimates before the FCT Review and Selection Committee, the Office of Management and Budget, and the Congress.

Budget Execution

Within their respective organizations, FCT Offices at the senior staff level are responsible for the day-to-day financial operations, management, and control of FCT funds. These offices have:

- Authority to move up to 10% of the funds allocated from one FCT project to another FCT project **provided** that: (1) there is an existing approved FCT project (no new starts) to receive the funds, (2) that the amount of FCT funds being transferred <u>into</u> or <u>out of</u> an existing FCT project does not exceed 10% of that project's approved funding level for that year, and (3) notification and justification is provided the FCT Program Manager. Amounts over the 10% limitation require prior approval from the FCT Program Manager.
- Authority to issue approved funding amounts to respective FCT projects.
- Authority to withdraw project funds for project non-performance.
- Authority to withdraw project funds and return them to the FCT Program Manager.
- Responsibility to execute budgets with a 99.5% obligation rate in the year funds are issued and ensure funds are fully disbursed in the second year of the appropriation's life.
- Responsibility to prepare and respond to data calls by the FCT Program Manager and the FCT Business Manager.
- Responsibility to perform financial analysis to establish that project managers are obligating funds within approved budgets.

An important methodology that assists financial and project managers in carrying out the above responsibilities is variance analysis between spend plans and actual obligations. Such analysis ensures plans are on target, no loss of funds at year end, and no over obligation of funds.

Disclosure of Information to Foreign Government Representatives and Vendors

All FCT projects require exchange of information with foreign vendors and their government organizations to facilitate FCT project management. While the regulations are clear about the procedures for disclosing CLASSIFIED information to foreigners, guidance concerning unclassified information is less clearly understood.⁵ This lack of clarity causes FCT project managers and others to take the "no risk approach—don't release <u>any</u> unclassified official information." While without apparent risk to the novice, this approach and its consequences introduces unacceptable financial and schedule risk to an FCT project and is clearly counterproductive to effective project management.

In FCT, <u>always</u> plan for disclosure. Planning should take place early in the proposal development process—anticipate what classified <u>and</u> unclassified information (such as a requirements document, test plan, or test report) may need to be passed to whom

PLAN FOR DISCLOSURE

and when. Also, consider foreign visitors attending test events, foreign vendor representatives who might be supporting the test and evaluation, VIP visits and briefings, and release of interim and final test reports to the vendor(s).

There are two approaches to disclosure. The first is to use the local disclosure office to gain the necessary approval for transferring information. By including the disclosure office on the Integrated Product Team from the beginning, the sponsor project manager can avoid or reduce the delay in sharing U.S. government information. Moreover, special situations can be identified sooner allowing solutions that are consistent with U.S. government interests and the information requirements of the particular FCT project. The second approach is to use common sense and take reasonable actions that are consistent with Secretary of Defense guidance for disclosure of unclassified information. The common sense approach poses a range of questions such as: Is the unclassified information already available in the public domain? Has the information been cleared for foreign release by an appropriate disclosure authority? Has the unclassified information already been cleared for public release by the Defense Technical Information Center or other reviewing authorities? Asking such questions and setting the stage for unclassified disclosure early in the management process are signs of a project being managed effectively and establishes an environment of trust and cooperation that will maximize opportunities for success.⁶

⁵ See Department of Defense Directive 5230.11 "Disclosure of Classified Military Information to Foreign Governments and International Organizations."

⁶ See Department of Defense Directive 5230.20, "Visits and Assignment of Foreign Representatives." The Defense Systems Management College offers a course, "International Security and Tech Transfer/Control," that will help project managers deal with disclosure issues and fulfill acquisition regulation requirements.

FCT Issue Awareness

Many FCT projects have issues associated with them. The sponsoring organization's FCT

project manager is expected to be cognizant of existing issues and vigilant for potential issues concerning their FCT project. Issues arise in a variety of areas to include political, financial, programmatic, and technical to name a few. The FCT Program Manager's expectation is **complete and timely reporting** of known or suspected issues so that a coordinated approach to mitigate risks can be formulated by the

TYPICAL ISSUES

- Competition from U.S. vendors
- Political issues
- Internal Service issues
- International issues
- Competing Service programs
- Loss of sponsor procurement funds

sponsor project manager with the help of the FCT Program Manager. Failure to surface known or suspected issues in a timely manner can cause irreparable harm to a project.

CHAPTER 5

TEST AND EVALUATION

GENERAL CONSIDERATIONS

Test and Evaluation is the major control mechanism of the acquisition process. The purpose of test and evaluation is to gather objective information to 1) enable an informed decision about the tested item's ability to fulfill the requirements and 2) determine if the item provides best value

An Operational Requirements Document (ORD) is a prerequisite for meaningful testing and evaluation. relative to similar items on the basis of cost and performance.

Test and Evaluation is not a single event but, rather, a process conducted in phases requiring coordination with and participation of the appropriate test community. Test denotes the actual testing of

hardware/software. Evaluation denotes the process whereby data are logically assembled and analyzed to aid systematic decision making. An Operational Requirements Document (ORD) is a prerequisite for meaningful testing and evaluation.

Testing of nondevelopmental items must be sufficient to ensure performance, operational effectiveness, and operational suitability for military application. A tailored test approach leveraging previous testing and operational use of a nondevelopmental item is necessary if FCT resources are to be conserved. An ideal FCT Test and Evaluation plan would not use any FCT resources to gather basic test or operational use data that is available from other sources. Similarly, the plan should seek to validate key performance parameters with a minimum expenditure of FCT funds. This approach reduces the Department of Defense's financial risk by identifying insurmountable problems early in the test and evaluation process.

The FCT Program Manager's intent is that FCT test reports generated by the sponsoring organization will be provided to participating vendors and their governments. An FCT project manager's initial planning for the structure of the test report must consider release of the report to foreign vendors and governments. With planning, the project manager can

Consistent with policy and regulations, FCT test reports will be provided to participating vendors and their governments.

avoid issues related to release of classified or sensitive information, compromising propriety information, or release of unclassified official information. Additional information on disclosure is in Chapter 4.

TEST AND EVALUATION PLAN

The sponsoring organization project manager is normally responsible for developing the FCT Test and Evaluation Plan. The Test and Evaluation Plan is typically generated through an Integrated Product Team.

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Often, a subset of the Integrated Product Team is tasked to develop the plan; these subsets may be referred to as the Test Planning Working Group, Test Integration Working Group, Test and Evaluation Control Group, etc.

A traceability matrix is an effective tool to help a project manager devise a test plan. One method used successfully for a number of years to design a test plan is to devise a traceability matrix that lists all requirements, the objective and threshold values, and traces these parameters to specific test procedures. Using a traceability matrix can help the project manager address key performance parameters early in the test plan.

Regardless of which approach is used in devising the test and evaluation plan, the plan should:

- Implement cost effective testing and evaluation.
- Recognize the nondevelopmental nature of FCT items.
- Identify key performance parameters and address them early in the testing phases.
- Consider a phased test and evaluation approach.
- Leverage previous and ongoing test and evaluation efforts.
- Include all credible items (both domestic and foreign) in the same timeframe to the same criteria.

An effective FCT test and evaluation plan considers the nondevelopmental nature of the test when addressing issues of performance, schedule, and cost.

COST EFFECTIVE TESTING

Too little testing risks not knowing if an item satisfies key performance parameters; too much wastes testing money and time; the wrong kind of testing (i.e. developmental vice operational)

Cost effective FCT testing translates into the right testing at the right time.

risks not understanding the effectiveness and suitability of an item while also wasting money and time. Cost effective FCT testing means testing should be the right kind; focus on the right issues; occur in the right sequence; and be at the right time and place in the right amount.

Recognizing The Nondevelopmental Nature of FCT—The Right Approach

In the past, too many FCT efforts were geared towards expensive and unnecessary developmental testing for an item that was already in production. Since FCT focuses on nondevelopmental items, the proposed test and evaluation approach should logically be operationally oriented. Operational tests are structured to determine performance of the foreign item under realistic conditions. The evaluation determines the effectiveness and suitability of the item against 1) the minimal acceptable operational performance requirements (threshold values) as specified in the Operational Requirements Document and 2) those specific requirements designated as key

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performance parameters. A sponsor's early recognition that developmental testing will be questioned helps ensure only essential tests are performed.

For some items, statutory requirements dictate that certain testing be done even when data are available. For example, weapons and munitions must demonstrate a certain level of reliability for safety reasons. While these requirements might be imposed on a nondevelopmental item, the project manager must still be careful to avoid unnecessary testing.

Key Performance Parameters—The Right Issues

At the beginning of the FCT proposal process, the sponsoring organization must determine the key performance parameters. FCT test phases are based on decision points tied to key

Key performance parameters address critical capabilities that must be met. performance parameters. A key performance parameter is defined as a capability or characteristic so significant that failure to meet the minimum acceptable value (threshold value) to satisfy the need is normally cause for project termination. Key performance parameters address questions relating to a system's operational, technical, support, or other capability that must be answered before

an item's overall effectiveness and suitability can be estimated/evaluated. These parameters are expressed in terms of "objectives" and "thresholds." If no objective values (the desired performance of the item) are specified, the threshold values shall be the objective values for the item's performance. If threshold values are not otherwise specified, the threshold value for performance shall be the same as the objective value; the threshold value for schedule shall be the objective value plus three months; and the threshold value for cost shall be the objective value plus 10 percent.

One traditional approach to develop key performance parameters is to list all specified and implied requirements from the validated requirements document(s) and then, working with the user/operator, determine which of these are critical. With the information, the sponsor can work with the FCT Integrated Product Team members to develop the key performance parameters and define the required (threshold) and desired (objective) criteria the item must satisfy. Understanding what the users see as "critical" is essential because this drives the entire test and evaluation decision process. For example, in a system as complex as the C-17, there only six key performance parameters. An inadequate or incomplete understanding of what is critical leads to poor decisions on items under consideration.

Testing and evaluating key performance parameters early avoids wasting scarce FCT resources. If a nondevelopmental item fails to meet a key performance parameter, testing on that item should be halted and the reason for failure carefully reviewed. This review will determine whether to

Testing and evaluating key performance parameters at the beginning avoids wasting scarce resources.

continue the FCT or remove the item from consideration altogether. In the case of a single item FCT, failure of the item to satisfy a key performance parameter normally results in termination of the project.

Phased Test Approach—The Right Sequence

The FCT project's test strategy should minimize the U.S. Government's financial exposure. Generally, a phased test approach is recommended to minimize FCT financial risk because this allows a contract to be structured so that all test items don't have to be purchased at the beginning. A phased test approach where the <u>first</u> test phase evaluates key performance parameters and subsequent phases evaluates non-critical items offers reduced risk because if an item doesn't pass the first phase, then purchasing of additional test articles can be avoided.

Just In Time Testing—The Right Time

Testing too early before an intended production procurement decision risks that competing items may be developed in the intervening period, or that the requirement may change between completion of testing and procurement after testing. "Just-in-time" FCT testing minimizes this risk.

Test Location—The Right Place

Comparison of test facilities to determine locations where testing should occur is part of designing a cost effective test plan. The FCT project manager should consider a variety of factors. The foremost of these considerations is which test location can conduct the test most cost effectively. The project manager must avoid automatically assuming their traditional Service test locations are best and should consider foreign facilities as well as other Services' facilities in the analysis for the most cost effective solution.

Leveraging Previous and Ongoing Test and Evaluation Efforts—The Right Amount

An important question early in FCT test and evaluation planning is: are there previous, ongoing, or planned tests which can provide test data on the candidate FCT item?

Such test data can be leveraged in several ways: 1) Review of foreign test data during FCT proposal development may help determine if the item will meet the parameters in the validated requirement; 2) Analysis of the foreign test data can influence the test and evaluation plan by avoiding duplicate U.S. testing and reducing FCT cost and schedule; and 3) Analysis of foreign test data along with the results of the FCT can indicate consistency of test results. The idea is to determine who else is doing or has done testing on a particular foreign item and then obtain their data before hand so a tailored FCT test plan can be formulated.

There are several ways to obtain previous test data. The usual way is to ask the vendor whose product is being evaluated for test data as well as the names of organizations that might have data from testing the

Leveraging previous test data of foreign items is an effective method of saving time and reducing costs.

FCT HANDBOOK TEST AND EVALUATION

vendor's item. If the vendor doesn't provide the information publicly, the test data exchange can occur within the framework of the Integrated Product Team. Unless the vendor is part of the initial Integrated Product Team, the sponsor won't understand what testing 1) has already been accomplished by the vendor or by existing customers using the product and 2) what testing is ongoing by potential customers. An FCT project sponsor should receive input from the vendor to develop a credible cost/schedule and test and evaluation plan.

Foreign defense organizations normally have conducted tests on items being considered for the FCT Program. Requesting this test data can require more formal procedures. This exchange of data frequently occurs through data exchange agreements. Another avenue is International Test Operations Procedures, such as the four nation (France, Germany, United Kingdom, and United States) Memorandum of Understanding that facilitates the exchange of test data and offers the opportunity to reduce duplicative test efforts for selected items of foreign equipment.

TESTING COMPETING U.S. DOMESTIC ITEM(S)

The test plan for an FCT project must incorporate an approach which accommodates testing and

evaluating credible U.S. domestic contending products. Competing U.S. items must be tested in the same time period to the same test criteria as foreign items. If an acquisition strategy and contracting approach which allows competition at the end of an FCT has been approved, the "discovery" of a U.S. contender during the FCT must immediately be brought to the FCT Program Manager's attention.

A sponsoring organization must provide all funds for costs associated with testing and evaluating any competing U.S. items.

If U.S. domestic items have been identified as candidates and there is a mixture of foreign and domestic items to evaluate, the FCT Program only provides FCT funding for costs associated with test and evaluation of the foreign items. An issue that frequently arises is the availability of sponsoring organization funds to evaluate U.S. domestic items. The sponsoring organization must identify their funding to test and evaluate U.S. domestic items before a proposal will approved. Foreign vendors should be aware of this stipulation as past FCT projects have been canceled or delayed while waiting on sponsor funding to evaluate competing U.S. items.

CATEGORIES AND TYPES OF FCT TESTS

There are <u>three types</u> of FCT Tests which fall into <u>two categories</u>. The <u>two categories</u> are **TEST TO PROCURE** and **NO PROCUREMENT INTENDED**. Within the **TEST TO PROCURE** category, there are two types of tests:

- 1) A **comparative test** is where multiple items are tested and evaluated against each other and against a set of requirements. At least one of the items in a comparative test must be foreign if the FCT Program is to provide FCT funding. If all items in a comparative test are foreign, FCT funding can be requested for the entire cost of the test (includes lease or purchase of test articles and execution of the test and evaluation).
- 2) A **qualification test** is where a unique foreign item is evaluated to validate that an item's capabilities match the vendor's claims. FCT funding may be requested for the entire test and evaluation costs (including lease or purchase of test article and execution of the testing).

Within the **NO PROCUREMENT INTENDED category**, the only type of test

is a technical assessment. While the laws establishing the FCT Program allow technical assessments, FCT funding for technical assessment projects is provided on a lower priority than projects where there is an intent to procure.

FCT HANDBOOK PROCUREMENT

CHAPTER 6

PROCUREMENT AFTER THE FCT

The underlying tenet of the FCT Program is procurement. If a foreign item evaluated in the FCT Program meets requirements and provides best value, there is an expectation that the item will be procured. This chapter discusses procurement related topics for FCT such as acquisition strategy and contract strategy as well as concepts to enhance procurement potential.⁷

ACQUISITION STRATEGY AND CONTRACTING STRATEGY

An acquisition strategy documents the approach a project manager in the Department of Defense intends to use to acquire or develop an item(s). A contracting strategy documents the contracting approach to implement the acquisition strategy.

For the FCT Program, the acquisition strategy is the documented approach the sponsoring organization's project manager intends to use to acquire the foreign test article(s) to be tested <u>and</u> the production quantities assuming a successful evaluation. The contracting strategy documents the contracting method (for acquiring the test articles <u>and</u> the production quantities if a procurement is intended) to support the project manager's acquisition strategy.

An experience some readers may be familiar with might help explain the concepts of acquisition strategy and contracting strategy:

A person needs shelter (the requirement) for their family (the user). In deciding on the acquisition strategy to obtain shelter, the person (the sponsor) responsible for obtaining shelter looks at credible alternatives. The options (materiel alternatives) in this example include purchasing a house, leasing a house, or moving into the grandparent's house. After evaluating the alternatives, the person decides on an acquisition strategy of leasing a house in order to save money (in hopes of buying a house later). The contracting strategy to support this acquisition strategy (of leasing house) might be to sign a rental contract for one year which includes a provision to purchase the rental property for some negotiated price with all rental payments applied to the purchase price of the house. This contracting strategy supports both the short term acquisition strategy of leasing a house while also preserving the option of purchasing the house if the sponsor so desires at a later date. If the sponsor had instead decided on a different acquisition strategy—to purchase a house outright, the contracting strategy to implement this approach would be very different from the rent-purchase contracting strategy just discussed.

⁷ For more information on the acquisition process, the reader is referred to Chapter 3 of Department of Defense Regulation 5000.2 and the FCT Homepage and the Acquisition and Technology Deskbook on the World Wide Web (http://www.acq.osd.mil/te/programs/fct and http://www.deskbook.osd.mil respectively).

PROCUREMENT FCT HANDBOOK

With the difference between an acquisition strategy and a contracting strategy illustrated by the previous paragraph, the following example which is more applicable to FCT might be more understandable:

A user in a sponsoring organization (the Services or U.S. Special Operations Command) becomes interested in a foreign item because it has the potential to satisfy a validated requirement. The user lets their acquisition community representative (normally a project manager in the sponsoring organization's acquisition community) know of their interest in a foreign item. The project manager should know if there is a validated requirement and should know if there is sponsor funding available to evaluate credible U.S. contenders should any surface during the "sources sought" request. The sponsoring organization project manager and/or user also know of the FCT Program where funds can be obtained to test and evaluate foreign nondevelopmental items.

The sponsoring organization's project manager receives authorization to initiate an acquisition project to provide the user with a materiel solution. Just as in the previous example, the project manager must decide on an acquisition strategy and a contracting strategy to implement this project. The project manager determines from experience and information available that a nondevelopmental acquisition approach will be preferred to satisfy the user's need. Before finalizing the acquisition strategy, the project manager determines potential players with their nondevelopmental products. The project manager does this by having the supporting Contracting Office publish a sources sought—Request For Information (RFI)—in the Commerce Business Daily (see "market investigation" section in Chapter 2). The project manager receives several vendor responses to the sources sought including foreign and U.S. vendors. In the process of finalizing the acquisition strategy, the project manager reviews the information provided by these vendors, assesses additional information provided via the Integrated Product Team (see Integrated Product Team section in Chapter 4), and consults with the supporting contracting office. If the foreign contenders are viable, the project manager will request FCT funds to test and evaluate them.

FCT EXPECTATIONS FOR PROCUREMENT

- Reasonable expectation
- CBD announcement
- Priced options
- Without further competition
- Critical evaluation criteria for FCT funding

The project manager knows an FCT proposal requires a documented acquisition strategy for both acquiring the test articles and acquiring the production articles (assuming a successful test). The project manager is also aware of the FCT Program Manager's preference for awarding a single contract with options to each competing vendor when an intent to procure production items exists. In this example, three foreign items and two U.S. domestic items appear as possible

candidates through the sources sought process. The project manager decides on the following acquisition strategy:

FCT HANDBOOK PROCUREMENT

The user requirement will be satisfied with a nondevelopmental solution if any contending nondevelopmental item meets the performance based requirements and provides best value. From the sources sought announcement, the sponsor project manager obtains literature and information on the competing products. The project manager determines from this information and discussions with the vendors' marketing representatives that two of the foreign items and one of the domestic items have a credible chance of satisfying the requirement. The project manager had announced in the sources sought notice that the U.S. Government's intent was to purchase two test articles from not more than three competing vendors and that production articles would be obtained without further competition from the vendor whose product met the requirements and provided best value.

The project manager's contracting strategy to implement his acquisition strategy is to use a full and open Request for Proposal for nondevelopmental items to procure two test articles in the basic contract from not more than three vendors. Then without further competition, the project manager would exercise option(s) to the basic contract to obtain production quantities from the vendor whose item met the requirements and provided best value.

The contracting approach of a proposed FCT project is important to the Review and Selection

Committee because the contracting strategy is a primary means to implement the project manager's acquisition strategy and testing strategy. In devising the contracting strategy, the project manager should consider the possibility of a late discovery of a credible contender. While the contract must abide by law, the Department of Defense's interest is to <u>avoid</u> a second contract competition to procure an item evaluated in FCT when that item meets requirements and provides best value.

The contracting strategy is a primary means to implement the FCT project's acquisition strategy.

The Contracting Officer assists the project manager in matching the contracting and acquisition strategies. When a synergistic approach between the contracting strategy, the acquisition strategy, and the test and evaluation approach exists, a proposal has a higher probability of funding in the selection process. An FCT project with a contracting strategy that does not support production procurement after the FCT is completed faces stiff competition for FCT funding.

As the project manager formulates strategies for acquiring both items to test and production items, there are issues to consider. One is the amount of risk that the vendor is willing to share. For example, will the vendor provide the test items at no or low cost or, if modifications are required prior to testing, make any modifications to the item at no or low cost. Such actions are not only more economical for the FCT Program but signal a cooperative risk sharing that is a good foundation for success.

PROCUREMENT FCT HANDBOOK

In summary, the acquisition and contracting strategy must be complementary. The project manager decides the best approach by answering the following questions and having the rationale and facts to support the decision⁸:

- Are the acquisition strategy and supporting contract approach for test articles consistent with the preferred FCT contracting approach to expedite production procurement following a successful FCT?
- Who will prepare the contract?
- Who will award the contract?
- Who will administer the contract after award?
- When will the contract be awarded?
- What is the contract period of performance?
- What mechanisms will be used to obtain data rights or intellectual property?

SOURCES SOUGHT TO DETERMINE PRODUCT AVAILABILITY

Every FCT acquisition strategy is predicated on available foreign products. The FCT project

manager has the responsibility to conduct a thorough market investigation before formal submittal of a proposal. This investigation ensures that all known viable contenders (both domestic and foreign) are being considered and reduces challenges to the acquisition of production articles after a successful test.

Sources sought announcements must specify a nondevelopmental approach.

The market investigation is published as a sources sought (normally a Request For Information) in the Commerce Business Daily to determine which vendors have <u>nondevelopmental</u> products that could be considered (both foreign and domestic). The project manager's Contracting Office(r) must be an <u>early</u> participant in the FCT proposal process and is a key member of the Integrated Product Team. Typically, the contracting office will assist the sponsoring organization's project manager in drafting the sources sought announcement.

WHO PREPARES THE FCT CONTRACT(S)

The doctrinal approach for preparing FCT contract(s) is for the sponsoring organization's project manager to prepare and oversee the FCT contract(s) that is awarded by the supporting contract office. A vendor may typically work with the project manager during the pre-award phase to provide general pricing and availability information, as well as information on their product. Major command and senior level FCT staff offices will normally not prepare or manage FCT contracts.

 $^{^8}$ For additional help see Commercial Advocate Forum Home Page (http://www.acq.osd.mil/ar/cadv.htm).

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CONTRACT MANAGEMENT

While the sponsor FCT project manager is responsible for managing the FCT project contract, this task is not done in isolation. The Defense Contracting Management Command provides

contract related services, especially contract administration. Of particular interest to the FCT project manager is the Command's international arm, the Defense Contracting Management Command District International (DCMDI) which acts as the single Contract Administration Service element outside the continental United States for Department of Defense Contracts. The services DCMDI can typically provide include:

DCMDI SERVICES

- Contract management
- Quality assurance
- Program & technical support
- Safety/environmental

Contract management: DCMDI area offices are expert at working with foreign vendors. DCMDI personnel can provide early contract administration services and assist with pre-award surveys. After contract award, DCMDI can administer payments, negotiate modifications, and handle contract close out to name a few of their services.

Quality Assurance: DCMDI can assist in both test and production article acquisition quality assurance. During both phases, DCMDI personnel can monitor contractor processes, identify product deficiencies, and can assist in final acceptance. For production, their inspectors can help process the first article to ensure that the item meets standards.

Program & Technical Support: The project manager can receive assistance in a variety of management areas to include technical analysis for costing and negotiation, cost/schedule control systems criteria, and monitoring contract to schedule progress, and transportation and customs advice.

Safety/Environmental: DCMDI can be especially helpful in the areas of safety and environmental compliance when working with foreign vendors who may not be familiar with U.S. requirements. This help applies to contract safety compliance, developing safety specifications, and reviewing waivers and deviations for approval.

For information on services provided by the Defense Contracting Management Command and its subordinate districts at http://www.dcmc.dcrb.dla.mil on the DCMC Website.

CHAPTER 7

REPORTING REQUIREMENTS

There are both legal and policy requirements for FCT reports. FCT reports are tools to help management at all levels of the FCT Program. Reports show if FCT projects are progressing satisfactorily and identify problems early enough in the program to take corrective action. If necessary, funds can be stopped when failure is inevitable or costs become excessive. Reports assist FCT managers in evaluating the status of a project in a periodic manner. Additionally, reports document the result of an FCT and are the basis for decisions on production procurements.

CONGRESSIONAL REPORTING

The FCT Program Manager is required to report the status of the FCT Program annually to Congress. One of the purposes of the FCT Annual Report to Congress is to show Congress that the FCT Program is accomplishing the intent of the congressional legislation. The report highlights areas such as funds expended, procurements resulting from the program, U.S. jobs generated, benefits to readiness of U.S. warfighters, and the savings realized. The report is also the means for the Services and U.S. Special Operations Command to inform Congress of their successes in using the FCT Program as a cost effective tool for increased readiness. Copies of past FCT Annual Reports to Congress are on the FCT Homepage at http://www.acq.osd.mil/te/programs/fct/ on the world wide web.

Besides the Annual Report, Congress is notified whenever there is an intent to obligate funds for new FCT projects. Congress has a 30 day notification period in which they can approve, modify, or reject the FCT Program Office's intent to apply FCT funding.

PERIODIC PROGRESS REPORTING

The Services and U.S. Special Operations Command compile and forward to the FCT Program Manager periodic progress reports for each active FCT project. These reports are due by the 15th working day after the end of each reporting period. Reports are submitted as frequently as the status of the project requires, and milestone attainments are reported as they occur. Reports should allow managers to identify difficulties in a timely manner to ensure prompt remedial action.

An active Integrated Product Team normally can reduce formal reporting to the FCT Program Manager. The FCT Program Manager, who is a member of all FCT Integrated Product Teams, should be included in team communications thereby automatically ensuring awareness of the current status and issues for FCT projects without a formal report.

A typical FCT Progress Report does not exceed a one page narrative plus an updated baseline project chart. The periodic project report format is outlined in Appendix {C}, project charts in

Appendix {H} and a sample project report is at Appendix {D}. If available, the FCT Tracking & Reporting System {aka 'FCT Proposal Generator' which can be found on the FCT Homepage} can facilitate generating reports and updating the status of baseline project charts.

FINANCIAL REPORTING

The Services and U.S. Special Operations Command provide the FCT Program Manager periodic financial reports which indicate the funding status of each FCT project. These financial reports provide information for projects authorized in the current fiscal year, as well as the <u>five</u> preceding fiscal years. A funding report format is in Appendix {E} but readers should consult the FCT Homepage for the current version.

SERVICE TEST & EVALUATION AND FCT CLOSE-OUT REPORTS

The Services and U.S. Special Operations Command provide completed test and evaluation technical reports on systems, equipment, and technologies evaluated under the FCT Program to the FCT Program Manager. These reports should address test and evaluation locations, key performance parameters, and if the parameters were achieved. The report should provide a basis for determining if an item passed the FCT and if the item provides best value.

At the conclusion of each funded FCT project, the sponsoring organization shall provide a final close-out report to include, but not limited to: FCT funding provided and expended by fiscal year, results of testing, disposition of test items, and any procurement decisions. Specifically the close out report should address contract award dates and amounts, all countries and vendors participating in the test, updates on actual or estimated cost avoidance in research, development, test and evaluation; production costs; life cycle costs; and fielding time savings. A suggested close-out format is outlined in Appendix I but readers should consult the FCT Homepage for the current version.

PROJECT REVIEWS

The sponsoring organization may be required to attend or present project reviews for selected FCT projects. Reviews may be requested as part of the annual FCT Proposal review and approval process or as a mid-term review normally conducted at the mid-year point. Sponsoring organizations and all project managers scheduled to receive funds are required to attend a Fiscal Year Kick-Off meeting hosted by the Department of Defense FCT Program Manager.

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Information in this version of proposal current as of:_____

Foreign Comparative Testing Proposal

SEE THE FCT HOME PAGE FOR THE MOST CURRENT VERSION OF THIS FORMAT.

FCT Proposals must use the most current version of this format. Attach a completed *Project Chart* prior to submitting to the FCT Program Office. Consult the FCT Handbook for explanation/rationale of questionnaire information and to observe a sample format filled in.

Project Name, I	Description, Funding	ESSENTIAL EVAL			
d Sponsor Infor		Validated ORD/MNS?	Yes O	No O	N.
a. Project Name. P	rovide a short descriptive title.	Item in Production?	0	0	0
Do not use a vendor s p	roduct name.	Test to Procure?	0	0	0
		Service Procurement \$ Available?	0	0	0
Candidate Item Cou	intries and Vendors:	Contract with Production Option(s)?	0	0	0
Foreign Country	Vendor	General/Flag Officer Letter of Support?	0	0	0
		Service \$ to Test Domestic Competitors?	0	0	0
		Logistics Considered?	0	0	0
		IPT E-mail Addresses provided?	0	0	0
b. Project Descripti	ion.				
	o 4 sentence description of the FC ws releases on the FCT Homepag				out
2. Provide additional in	formation as necessary to assist	FCT Program Manager and th	ne Review	and Select	ion
	ng project's merit. Continue on a				

Version as of 7/15/98

APPENDIX A FCT HANDBOOK

c. FCT Funding Requested. By year and total:

	FY	FY	FY	FY	FY	Total
Dollars (\$M)	\$	\$	\$	\$	\$	\$

<u>d.</u>	Sponsoring organizat	ion. Check the service/or	ganization sponsoring this FCT.
		int, mark multiple organiza be listed in sponsor PM blo	ations as needed and identify lead. (Lead point of ock.)
	Joint project lead	service/organization:	
	☐ Army	□ Navy	☐ Air Force
	☐ USSOCOM	☐ Marine Corps	☐ Other:
Sp	onsor Project Manage	r information.	
	Name & Grade/Rank	::	
	Title:		Position:
	Phone #:		Fax #:
	Organization:	E-mail A	Address (mandatory):
	roposal Information		sed on the end decision of FCT being proposed:
	☐ Test to procure. Estandard or similar decise		purchase decision, Milestone III, Type Classification
	Check the type of test to	procure:	
	☐ Comparati	ve test (multiple items, at	least one of which is foreign).
	☐ Qualificati	on test (a unique foreign i	tem with no other foreign or US item contenders).
	☐ Select among com	peting items for EMD	. (Milestone II/Decision)
	☐ Develop performa	nce or purchase speci	ication for follow-on competitive buy.
	☐ Assess item perfor	rmance to develop a n	ew military requirement.
	☐ Concept Evaluation	on, Milestone I, (i.e. te	chnology assessment).
	☐ Other. State end in	ntention of FCT:	
<u>b.</u>	Proposal Type. Is this	submittal:	
	A continuing project is or	ne which was started in a p	revious year and will continue into the current year.
	☐ New Start Project	☐ Continui	ng funded by FCT in previous years

2.

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		for early notice of a potential submission but does not commit the sponsor. y-coordinated and in a formal request for FCT funding.
	☐ Preliminary (draft)	☐ Final
	☐ In-cycle	☐ Out-of-Cycle
	If a similar FCT proposal was s details of the previous submissi	submitted to FCT Program Office in the past, mark 'resubmission' and give ion.
	☐ Resubmission. If so, en	ter the following from the original submission:
	Year:Spor	nsor organization:
	Under what title:	
3.		m Contact Information (mandatory). Provide e-mail numbers for the following individuals. This list is the basis for initial s as appropriate.
	Project Manager (Governmen	t Sponsor):
	Project Manager(s) (Vendors)	ß
	<u>User Representative</u> :	
	Program Element Manager: _	
	Staff FCT POC (Service level	<u>)</u> :
	Embassy Representative(s):	
	DCMD-I Representative:	
	Contracting Office POC (Gov	vernment):
	Disclosure Office Representati	tive:
	FCT Program Office (PM):	
	First O6/SES/General/Flag On Command:	fficer government sponsor Project Manager's Chain of
	Test and Evaluation Coordina	tor/POC:
	Requirement POC:	
4.	Requirement. Is there a curre	ent validated or approved requirement? (MNS, ORD)
	☐ No. There is no current validate	ed requirement document applicable to this FCT.
	☐ Yes. Provide information below multiple requirements on an attache	v and attach copy of requirement to the proposal. Provide information on d sheet.

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Mission Needs Statement:	
Title:	
Number:	
Classification Level:	
Signed by:	
Name & Grade/Rank:	
Position:	
Operational Requirements Do	ocument:
Title:	
Number:	
Signed by:	
Name & Grade/Rank:	
Organization:	
☐ Other, Explain (i.e. Requiren	nent statement is in draft, or FCT effort is a technology assessment)
User Advocacy and Join	nt Coordination Information.
a. User Advocacy. Identify the appropriate.	e senior most user/operator advocate. Attach letters of support as
• •	
Title:	Position:
	Fax #:
	E-mail Address (mandatory):

5.

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	Point of Contact	E-mail Address(mandator
Organization	Point of Contact	E-man Address(mandator
Continue on separate sheet if nec	cessary	
s there USSOCOM or other	Service interest/support?	
☐ No. There is no other inte	erest/support for this FCT p	roposal.
	-	-
☐ Yes. There is other intere staff level FCT support offices.	st/support for this FCT proj	posal. List interested organizations
stair level PC1 support offices.		
Organization	Point of Contact	E-mail address(mandator
C		,
d Joint Duciest Assessment	TC 41 10 10 1/2	
a Tom Project Agreement	If there is multiple interest and/o on the requirement to be satisfie	
	•	
participating organizations agreed	mer document that participating s	sponsor organizations have signed.
participating organizations agreed		
participating organizations agreed		
participating organizations agreed		

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Market In	vestigation. Provide ma	arket investigation information:		
a. Commerc	e Business Daily (CBD)	Announcement. (required - attach c	copy)	
Type of a	announcement (RFI, RFI	P, BAA, etc.):		
Announc	ement Title:			
Date of C	CBD announcement:			
"Respond	d by" date in CBD annou	incement:		
b. Other man		ies. List other actions that have been ac	ecomplished or are	
Foreign cand List all candida (NDI, prototype			ne and development s	
Country	Vendor	Item Name	Development Status	FCT
<u> </u>	1			I

6.

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d. Foreign Country Use. Indicate for FCT funded candidates if the item or a variant is in current use. List countries where item is in use; if no, explain why.

Item Name	In use?	Where or Comment					
Cost Benefit and Savings	Cost Benefit and Savings Estimate. (Congressional Interest Item)						
a. Benefits. Describe in general th	e benefits o	of conducting this FCT. Benefits can include specifics such as					

7.	Cost Benefit and	Savings Estimate.	(Congressional Interest Item)
----	-------------------------	--------------------------	-------------------------------

,	cost savings or avoidance, early fielding to satisfy urgent requirements, increased performance of a weapon system or intangibles such as potential lives saved, competition to existing sole source suppliers, etc.:							

Continue on separate sheet if necessary

b. Cost savings. If the U.S. Government were to develop this item, estimate how much it would cost. Do not deduct the cost of doing the FCT. Estimate savings in per unit cost if item is procured for production. Estimate the savings in operations and support costs over item's life-cycle.

(1) RDT&E Cost avoidance: \$	
` '	

- (2) Savings in procurement costs: \$_____
- (3) Operations and support life-cycle savings: \$

c. Methodology to estimate cost savings. Describe the method used to estimate savings in the RDT&E, production, and/or life cycle costs.

Continue on separate sheet if necessary

8. Integration. Is integration, modification or adaptation required before the foreign item(s) can be tested or fielded within DoD? Will U.S. doctrine or tactics have to be changed before fielding? Does this FCT involve the testing or modification of Software?

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□ No to all questions.		
Yes. (Explain what needs to be done, how it will be done, and who will do the work. How much will integration cost, and who will pay the integration costs? Are integration cost reflected on the project chart?)		
Continue on separate sheet if necessary		
Acquisition Strategies. Note: If the FCT Acquisition Strategy for multiple vendors varies for ndividual vendors, provide information for each vendor as an attachment to this FCT proposal.		
a. Acquisition of Test Items.		
(1) Describe the acquisition strategy to acquire test articles for the FCT phase. Include how the foreign and domestic test articles will be acquired (no cost loan, lease, purchase, etc.), contract strategy (sole source, letter contract, etc.), the foreign contract management approach (local contract office, DCMD-I, Other), and the foreign item maintenance concept (separate support contract, U.S. representative, U.S. with spare parts) during the FCT testing period.		
Test Item Acquisition Strategy:		
Test Item Contract Strategy:		
Foreign Contract Management Approach:		
Foreign Item Maintenance Concept:		
Estimated Test Item Quantities & Unit Cost:		
(2) Did Vendor(s) give cost estimates for providing their items:		
☐ Yes. ☐ No. ☐ Written price & delivery schedule is available.		
(3) Purchasing Test Items. If approach for acquiring test articles is to purchase the foreign items, has the vendor(s) been asked if they are willing to provide test article(s) at no cost or through lease (as part of vendor's risk sharing participation in this FCT)?		
☐ Yes, vendor and/or foreign government has been asked.		
☐ No discussion concerning no cost loan or lease of test articles has occurred.		
(4) Additional explanation: (Add any other information that would be helpful in understanding the testing phase acquisition.)		

9.

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Continue on se	eparate sheet if	necessary				
Acquisition of Pro	duction (Fie	lded) Items.				
(1) Describe the accompleted assuming competitive solicitation logistic support strates	ng item met on, etc.), estim	requirement	s. Provide c	ontract strateg	y (sole source	, full and open
Production Ac	quisition St	rategy:				
Production Co	ntract Strate	egy:				
Estimated Pro	duction Iten	n Quantities	& Unit Cos	st:		
Production &	Fielding Log	gistic Suppor	t Strategy:			
(2) Sponsor Progr number been identifie				ement(s). H	as a program ε	element (PE)
— • • • • • • • • • • • • • • • • • • •						
☐ Yes. (Fill in POM Number			•		ŕ	
POM Number	Referenced	:			·	
POM Number The PE Title:	Referenced	:			,	
POM Number	Referenced	:				
POM Number The PE Title:	Referenced FY	:				
POM Number The PE Title: PE Number:	FY	FY\$	FY \$	FY \$ service pro	FY \$ curement at	FY
POM Number The PE Title: PE Number: Dollars (\$M)	FY \$ r project linow procureme Champion.	FY \$ e does not ex nt funding will Provide name, 1	FY \$ sist to fund be obtained a second contained a second contain	FY \$ service progiven situation	FY \$ curement at a).	FY\$ this time.

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			datory):
(4) Addition			would be helpful in understanding the
Contin	ue on separate sheet if n	ecessary	
. Contracts F	unded with FC	CT Money.	
	Γ: vendor(s) name, est		other procurement methods used to ct award(s), product(s) to be provided
Vendor Name	Total Contract Amt (\$)	Amount for Products	Amount for Vendor Service
b. U.S. Contrac	ts. List all anticipated	d US contracts by vendor, estim	nated dollar amount for each contract
award in support or	cooperation of the FC	CT. For US contractors, identify	by by vendor the amount of and location acquire or test competing U.S. item.

U.S. Vendor Name and Location	Total Contract Amount (\$)	Amount for Products	Amount for Vendor Services

FCT HANDBOOK APPENDIX A

11. Sponsor RDT&E Contribution.

<u>a. Sponsor contribution.</u> Is the sponsoring service contributing resources to this FCT, i.e., funding all TDY trips, buying test items, paying for management and administrative support, etc.

☐ Yes. Estimate the total amount by year:

	FY	FY	FY	FY	FY	Total
Dollars (\$M)	\$	\$	\$	\$	\$	\$

What is the service contribution going to be used for?

1			

Continue on separate sheet if necessary

☐ No sponsor funding will be provided to test and evaluate the foreign item(s).

b. Sponsor Funding of Competing U.S. Candidates. If there is a US product competing to satisfy the sponsor's requirement (or there is a likelihood that a US product will compete in the sponsor's procurement phase after an FCT is completed), have funding and its PE manager been identified to fund the test and evaluation of all US item(s) competing against the foreign item(s)?

☐ Yes. Identify amount by FY in PE to fund testing of domestic contender(s):

PE Title: ______PE Number: _____

PE Manager Name and Grade/Rank:

PE Manager e-mail address (mandatory):

Phone: ______FAX: _____

PE Amount	FY	FY	FY	FY	FY	FY
Dollars (\$M)	\$	\$	\$	\$	\$	\$

 $[\]hfill\square$ No sponsor funding has been identified.

12. Test and Evaluation.

Foreign Data Request. Has test and evaluation	n data been requested for the foreign iter	n(s)?
---	--	-------

☐ Yes. From whom and when: _____

□ No. Explain why not: _____

APPENDIX A FCT HANDBOOK

<u>b. F</u>	Foreign Data Use. Has foreign data been received and validated? How will it be used?
<u>c. l</u>	Developmental Testing. Identify type & nature of developmental testing to be performed.
	Continue on separate sheet if necessary
	Operational Testing. Is an operational test to be done?
	☐ Yes. By who?
	□ No. Explain why:
<u>e. k</u>	Key Performance Parameters. Have KPPs been identified by the user?
	☐ Yes. (attach list of KPPs) ☐ No. When will KPPs be identified?:
	<u>Cest Plan or Test & Evaluation Master Plan (TEMP).</u> Has draft Test Plan or TEMP been ared?
	☐ Yes. (attach) ☐ No. Give status:
g. 7	<u>Γest Phases.</u> Identify the test phases and describe the major decision points during the evaluation?
	Continue on separate sheet if necessary
	SUES. List all. For example: political impacts, Congressional interest, U.S. production base concerns, bry, 'Buy America' Acts, offset arrangements, etc.

Continue on separate sheet if necessary

FCT HANDBOOK APPENDIX A

ł	. Attachments.
	Project Chart (mandatory)
	Item Picture(s) (mandatory)
	CBD Announcement (mandatory)
	List continuation sheets
	List other attachments, e.g. requirement, memos of support, etc.

Information in this version of proposal current as of: 1 May 199X

Foreign Comparative Testing Proposal

SEE THE FCT HOME PAGE FOR THE MOST CURRENT VERSION OF THIS FORMAT.

FCT Proposals must use the most current version of this format. Attach a completed *Project Chart* prior to submitting to the **Office of the Secretary of Defense**. Consult the FCT Handbook for explanation/rationale of questionnaire information and to observe a sample format filled in.

1. Project Name, Description, Funding and Sponsor Information.

<u>a. Project Name</u>. Provide a short descriptive title. Do **not** use a vendor's product name.

Less Than 3kW	Generator Set

Candidate Item Countries and Vendors:

Foreign Country	Vendor
Canada	Mechron Energy,
	Ltd.

ESSENTIAL EVALUATION CRITERIA			
Validated ORD/MNS?	Yes ●	No O	N/A O
Item in Production?	•	0	0
Test to Procure?	•	0	0
Service Procurement \$ Available?	•	0	0
Contract with Production Option(s)?	•	0	0
General/Flag Officer Letter of Support?	0	•	0
Service \$ to Test Domestic Competitors?	•	0	0
Logistics Considered?	•	0	0
IPT E-mail Addresses provided?	•	0	0

b. Project Description.

1. Provide a simple 3 to 4 sentence description of the FCT project that will be used to inform Congress about this effort. (See FCT news releases on the FCT Homepage for entry style. No more than 4 lines, please.)

The Less Than 3kW Generator set project responds to the requirement to replace soon-to-be obsolete 1.5kW gasoline generators. This project will evaluate soldier portable, multi-fueled generator sets with at least 1.5kW of power for AC and DC capability and compliance with tactical generator low noise requirements.

2. Provide additional information as necessary to assist OSD FCT Program Manager and the Review and Selection Committee in determining project's merit. Continue on attached sheet if necessary.

The Army is designated lead in this project with the USMC participating in test planning and execution and with joint fielding plans. The USAF is an interested observer since it has an urgent requirement (PM MILSTAR, Pacer Speak project) that can potentially be satisfied with this generator.

APPENDIX B

2.

	c.	FCT	Funding	Requested.	By	year and tota
--	----	-----	----------------	------------	----	---------------

	FY 95	FY 96	FY 97	FY 98	FY 99	Total
Dollars (\$M)	\$0.535	\$.114	\$	\$	\$	\$.649

d. Sponsoring organization. Check the service/organization sponsoring this FCT.

Joint Project. If joint, mark multiple organizations as needed and identify lead. (Lead point of contact information will be listed in sponsor PM block.)

Joint project lea	nd service/organization: A	Army		
Army	□ Navy	☐ Air Force		
□ USSOCOM	Marine Corps	☐ Other:		
Sponsor Project Manag	ger information.			
Name & Grade/Ran	ık: LTC (05) J. O''Conne	ell		
Title: Project Mana	gerF	Position: PM		
Phone #:703-578-6	125F	Fax #:703-578-6580		
Org:: USA PM Mo	b Elc Pwr E-mai	l Address: pm-mep@emh10.belvoir.army.mil		
Proposal Information. a. FCT Category. Check the applicable category based on the end decision of FCT being proposed:				
Test to procure. End of FCT effort will be a purchase decision, Milestone III, Type Classification Standard or similar decision.				
Check the type of test t	o procure:			
☐ Comparative test (multiple items, at least one of which is foreign).				
☐ Qualification test (a unique foreign item with no other foreign or US item contenders).				
Select among competing items for EMD. (Milestone II/Decision)				
☐ Develop performance or purchase specification for follow-on competitive buy.				
☐ Assess item perf	formance to develop a ne	w military requirement.		
☐ Concept Evaluat	ion, Milestone I, (i.e. tec	hnology assessment).		
Other State end intention of ECT:				

b. Proposal Type. Is this subm	nittal:
A continuing project is one wl	nich was started in a previous year and will continue into the current year.
New Start Project	☐ Continuing funded by FCT in previous years
	s for early notice of a potential submission but does not commit the sponsor. lly-coordinated and in a formal request for FCT funding.
☐ Preliminary (draft)	☐ Final
In-cycle	☐ Out-of-Cycle
If a similar FCT proposal was details of the previous submiss	submitted to FCT Program Office in the past, mark 'resubmission' and give sion.
☐ Resubmission. If so, e	nter the following from the original submission:
Year:Spo	onsor organization:
Under what title:	
Project Manager (Governme)	nt Sponsor):
7798 Cissna Rd., Suite 2	nt Sponsor): LTC J. O'Connell (Kelly Alexander), US Army PM MEP, 200, Springfield, VA 11250-3199, PH (703) 806-7832/7839, LX (703) 451-1199, e-mail: pm-mep@emhl0.belvoir.army.mil
Army Project Sponsor: I 7798 Cissna Rd., Suite 2 DSN 656-7832/7839, FA USMC Project Sponsor: MARCORSYSCOM, S	LTC J. O'Connell (Kelly Alexander), US Army PM MEP, 200, Springfield, VA 11250-3199, PH (703) 806-7832/7839, X (703) 451-1199, e-mail: pm-mep@emhl0.belvoir.army.mil LTC Paul Koper (GySgt Carl Lawson), SE-UT, 2033 Barnett Ave., Suite 315, Quantico, VA 22134-2 ext. 232, DSN 278-2242 ext. 232, FAX (703) 784-3244, e-
Army Project Sponsor: I 7798 Cissna Rd., Suite 2 DSN 656-7832/7839, FA USMC Project Sponsor: MARCORSYSCOM, S 5010, PH (703) 784-2242 mail: lawson@quantico Project Manager(s) (Vendors	LTC J. O'Connell (Kelly Alexander), US Army PM MEP, 200, Springfield, VA 11250-3199, PH (703) 806-7832/7839, X (703) 451-1199, e-mail: pm-mep@emhl0.belvoir.army.mil LTC Paul Koper (GySgt Carl Lawson), SE-UT, 2033 Barnett Ave., Suite 315, Quantico, VA 22134-2 ext. 232, DSN 278-2242 ext. 232, FAX (703) 784-3244, e-
Army Project Sponsor: In 17798 Cissna Rd., Suite 20 DSN 656-7832/7839, FA USMC Project Sponsor: MARCORSYSCOM, S 5010, PH (703) 784-2242 mail: lawson@quanticomail: lawson@quantic	LTC J. O'Connell (Kelly Alexander), US Army PM MEP, 200, Springfield, VA 11250-3199, PH (703) 806-7832/7839, X (703) 451-1199, e-mail: pm-mep@emhl0.belvoir.army.mil LTC Paul Koper (GySgt Carl Lawson), SE-UT, 2033 Barnett Ave., Suite 315, Quantico, VA 22134-2 ext. 232, DSN 278-2242 ext. 232, FAX (703) 784-3244, e-usmc.mil
Army Project Sponsor: In 17798 Cissna Rd., Suite 20 DSN 656-7832/7839, FA USMC Project Sponsor: MARCORSYSCOM, S 5010, PH (703) 784-2242 mail: lawson@quantico. Project Manager(s) (Vendors Ave., Ottawa, Ontario, Can US Representative: Den DC, PH (202) 315-8895, User Representative: Chad.	LTC J. O'Connell (Kelly Alexander), US Army PM MEP, 200, Springfield, VA 11250-3199, PH (703) 806-7832/7839, X (703) 451-1199, e-mail: pm-mep@emhl0.belvoir.army.mil LTC Paul Koper (GySgt Carl Lawson), SE-UT, 2033 Barnett Ave., Suite 315, Quantico, VA 22134-2 ext. 232, DSN 278-2242 ext. 232, FAX (703) 784-3244, e-usmc.mil D: Ed O'Brien, Mechron Power Systems, Ltd., 2437 Kaladar ada, L1V 8B9, PH (613) 733-3855, e-mail: obriene@aol.comnis O'Brien, Mechron Power Systems, Inc., Washington, e-mail:dobrien@capitalnet.com Myers, US Army CASCOM, ATCL-MEF, 3901 A Ave., Suite 200, PH (804) 734-2967, DSN 687-2967, FAX (804) 734-1174,

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Staff FCT POC (Service level): Mr. Al McKee, US Army ICPA, AMXIO, Aberdeen Proving Ground, MD 21005-5055, PH (410) 278-1373, DSN 298-1373, email: amckee@apg-9.apg.army.mil

Embassy Representative(s): Judith Bradt, 501 Pennsylvania Ave, NW, Washington, DC, 2001; PH (202) 682-7743, FAX (202) 682-7619, email: judith.bradt@wshdc01.x400.gc.ca

<u>DCMD-I Representative</u>: **COL David Brown, PH (613) 992-2687, FAX (613) 996-5340,** email: dbrown@can-link.ottawa.dcmci.dla.mil

<u>Contracting Office POC (Government)</u>: **Jacqueline Hale, US Army ATCOM, AMSAT-I,** 4300 Goodfellow Blvd., St. Louis, MO 63120-1798, PH (314) 263-3587, DSN 693-3587, e-mail: halej@atcom.army.mil

Disclosure Office Representative: Pete Batten, email: battenp@pentagon.osd.mil

FCT Program Office (PM): LTC Diana Davis, 1111 Jefferson Davis Hwy., CGN, Ste. 303, East Tower, Arlington, VA 22202-1111, PH (703) 601-3831, FAX (703) 602-7837, email: diana.davis@osd.pentagon.mil

First O6/SES/General/Flag Officer government sponsor Project Manager's Chain of Command: COL Becker/COL Cross, US Army PM MEP, 7798 Cissna Rd., Suite 200, Springfield, VA 11250-3199, PH (703) 806-7823, DSN 656-7823, FAX (703) 451-1199, e-mail: pm-mep@emhl0.belvoir.army.mil

Test and Evaluation Coordinator/POC:

<u>Technical Tester:</u> Jose Antonetti, US Army Aberdeen Test Center, STECS-AE-SF, Aberdeen Proving Ground, MD 21005, PH (410) 278-9453, DSN 298-9453, FAX (410) 278-5580, e-mail: antonej@apg-1.army.mil

Operational Tester: Jim Barron, US Army TEXCOM, CSTE-TES-CS, Fort Hood, TX 76544-5056, PH (817) 288-1402, DSN 738-1402, FAX (817) 288-9746, e-mail: barronj@texcom.army.mil

Requirement POC: MG John Coburn, Commandant, USA Ordnance Center and School, Aberdeen Proving Ground, MD, email: jcoburn@apg-1.apg.arm.mil

	School, Aberdeen Proving Ground, MD, email: jcoburn@apg-1.apg.arm.mil
4.	Requirement. Is there a current validated or approved requirement? (MNS, ORD)
	☐ No. There is no current validated requirement document applicable to this FCT.
	Yes. Provide information below and attach copy of requirement to the proposal. Provide information on multiple requirements on an attached sheet.)
	Mission Needs Statement:
	Title:
	Number:
	Classification Level:
	Date Signed:

Signed by:	
Name & Grade/Rank	:
Position:	
Organization:	

Operational Requirements Document:

Title: Operational Requirements Document for the Less Than 3kW Generator

Number: 160-135

Classification Level: Unclassified

Date Signed: 14 Jul 94

Signed by:

Name & Grade/Rank: Fredrick Franks, General (O-10), USA

Position: Commanding General

Organization: Training and Doctrine Command

5. User Advocacy and Joint Coordination Information.

<u>a. User Advocacy</u>. Identify the <u>senior most</u> user/operator advocate. Attach letters of support as appropriate.

Name & Rank: MG John Coburn

E-mail Address (mandatory): jcoburn@apg-1.apg.arm.mil

Title: Commandant, US Army Ordnance Center and School (OC&S)

Position: Commanding General, US Army OC&S

Organization: U.S. Army OC&S, Aberdeen Proving Ground, MD

Phone: 410-278-1373 FAX: 410-278-7545

<u>b. Coordination.</u> Every FCT proposal must be provided to USSOCOM and other Services for joint interest consideration.

Yes. Identify the organization(s) and Point of Contact(s). Include e-mail addresses:

Organization	Point of Contact	E-mail Address
Navy	Mr. Manwarring; (703) 604- 2100	manwarring@nfec.navy.mil

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HQUSAF,IPSA, SAF/IAQ	Maj Jeff Christoff; (703) 588-8926 Mr. Weyant; (916) 544-2930	christoff.jeffery@af.pentagon.mil weyant@mcclellan.af.mil
USMC	Ms. Shawn Prablek; (703) 784-5827	prableksj@quantico.usmc.mil
	LTC Paul Koper (GySGT Carl Lawson), (703) 784- 2242 ext. 232	lawsonc@quantico.usmc.mil
USSOCOM	Ms. Vicki Carey; (813) 828-9417	careyv@socom.mil

Continue on separate sheet if necessary

c. Is there USSOCOM or other Service interest/support?

Yes. List interested organizations.

Organization	Point of Contact	E-mail address
USMC (MARCORSYSCOM)	Mr. Fred Jones	jonesf@mar-1.usmc.mil
USAF (PM MILSTAR) Joint UAV Program Office	Col. Alex Knox	alex.knox@wp.af.mil
US Navy NFEC	Mr. Sam Smith	smith-sam@nfec.navy.mil
SMART-T Program Office	LTC Eric Holder	holderet@sarda.army.mil

(2) Joint Project Agreement. If there is multiple interest and/or support, have sponsoring and participating organizations agreed on the requirement to be satisfied by a joint FCT?

Yes. Identify joint MOA or other document that participating organizations have signed. A joint MOA was signed between the Army and the USMC on 15 April 1994.

☐ No. Sponsoring Organizations have not agreed on a joint requirement. Explain:

6. Market Investigation. Provide market investigation information:

a. Commerce Business Daily (CBD) Announcement. (required - attach copy)

Type of announcement: RFI

Announcement Title: Less Than 3kW Generator Set

Date of CBD announcement: 29 Dec 1994

"Respond by" date in CBD announcement: 29 Jan 1995

<u>b. Other market investigation activities.</u> List other actions that have been accomplished or are scheduled to be accomplished.

A market investigation in FY 1995 identified seven diesel generator sets (4 foreign and 3 domestic) that potentially could satisfy the Less Than 3kW Generator Set requirement. The companies providing models for testing were: Acmi-Motori; AFM; Billows Supply; Mechron; Onan; Polar Products; and Teledyne The testing showed that two of these generator sets met the Army requirements. The 2kW diesel generator from Mechron (Canada) and the 2.5kW diesel generator from Teledyne (U.S.) were identified as viable products that could meet the Army requirements.

c. Candidates Identified. Indicate Number of:

Foreign candidates identified: 1 U.S. candidates identified: 1

List All Candidates to be evaluated. Indicate country of origin, vendor, item name and development status (NDI, prototype, in production, fully developed but not in production, etc.) Place an 'X' in FCT column if FCT funds are requested to test this item.

Country	Vendor	Item Name	Status	FCT
Canada	Mechron Energy, Ltd.	2kW Generator Set	NDI	X

d. Foreign Country Use. Indicate for FCT funded candidates if the item or a variant is in current use. List countries where item is in use; if no, explain why.

Item Name	In use?	Where or Comment
2kW Generator Set	Yes	Canadian Armed Forces; proc contract for 1500

7. Cost Benefit and Savings Estimate. (Congressional Interest Item)

<u>a. Benefits.</u> Describe in general the benefits of conducting this FCT. Benefits can include specifics such as cost savings or avoidance, early fielding to satisfy urgent requirements, increased performance of a weapon system or intangibles such as potential lives saved, competition to existing sole source suppliers, etc.:

A study has shown that most of the joint service requirements for 3kW diesel generators can be satisfied with the Canadian Mechron 2kW set or the Teledyne 2.5kW set. The sets costs about \$3,000 less than the 3kW set currently being evaluated by PM MEP. This will amount to a real dollar savings in the first year buy of approximately \$2.0M (650 units for Army) and \$2.0M in the second year buy (650 units for USAF). The total 2kW production quantities needed by DoD is expected to eventually exceed 8,500 units with a potential cost savings of \$25M.

The Less Than 3kW Generator Set is also beneficial because it will ensure that soldiers have a reliable, low noise power source, where large tactical quiet generators are not available, and when gasoline is no longer available on the battlefield. It will also prevent proliferation of non-standard commercial generators in a field environment. The Mechron or Teledyne set can be fielded two years sooner than the planned development and fielding of a new 1.5 kW generator.

Continue on separate sheet if necessary

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- <u>b. Cost savings.</u> If the U.S. Government were to develop this item, estimate how much it would cost. Do not deduct the cost of doing the FCT. Estimate savings in per unit cost if item is procured for production. Estimate the savings in operations and support costs over item's life-cycle.
 - (1) RDT&E Cost avoidance: **\$2M**
 - (2) Savings in procurement costs: \$3K each; total \$25.5M
 - (3) Operations and support life-cycle savings: \$18.275M
- <u>c. Methodology to estimate cost savings.</u> Describe the method used to estimate savings in the RDT&E, production, and/or life cycle costs.

The RDT&E savings is based on how much it cost to develop a new 1.5kW Gasoline generator. Production savings are based on a procurement of 8,500 units @ \$3K savings per unit. Life cycle savings is based on the a mean-time-between-failure estimate that is 43% better than the current generator.

Continue on separate sheet if necessary

d. Other benefits or savings.

Establishing a TC-Standard Less Than 3kW Generator Set will potentially eliminate the need for field commanders to buy a variety of non-standard commercial generators that are difficult to support logistically in the field.

e. Impact(s). Impact if this project is not funded.

If an inexpensive, reliable Less Than 3kW Generator Set cannot be fielded, the military will face a degenerating situation in providing electric power on the battlefield as older generators become more difficult to maintain. Current plans call for the elimination of gasoline on the battlefield as a tactical fuel and eventually the small gas generators will become obsolete.

Continue on separate sheet if necessary

8.	Integration. Is integration, modification or adaptation required before the foreign item(s) can be tested or
	fielded within DoD? Will U.S. doctrine or tactics have to be changed before fielding? Does this FCT involve
	the testing or modification of Software?

	TAT -	4 11	l 4 !
1 1	INO	то ап	Lauestions.

Yes. (Explain what needs to be done, how it will be done, and who will do the work. How much will integration cost, and who will pay the integration costs? Are integration cost reflected on the project chart?)

There is a need to relocate the fuel tank filter on the Mechron generator. Vendor will do at no expense prior to the delivery of the test articles.

Continue on separate sheet if necessary

- **9. Acquisition Strategies.** Note: If the FCT Acquisition Strategy for multiple vendors varies for individual vendors, provide information for each vendor as an attachment to this FCT proposal.
 - a. Acquisition of Test Items.

(1) Describe the acquisition strategy to acquire test articles for the FCT phase. Include how the foreign and domestic test articles will be acquired (no cost loan, lease, purchase, etc.), contract strategy (sole source, letter contract, etc.), the foreign contract management approach (local contract office, DCMD-I, Other), and the foreign item maintenance concept (separate support contract, U.S. representative, U.S. with spare parts) during the FCT testing period.

Test Item Acquisition Strategy: Twenty-four items will be purchased by the Army. Twelve items will be purchased from each company for FCT testing. The draft purchase description at enclosure 7 has been provided to each vendor.

Test Item Contract Strategy: Two firm fixed price contracts will be awarded by PM MEP through ATCOM to acquire test items from each vendor. Production options will be added to accommodate follow-on procurements from the services upon successful completion of the FCT testing.

Foreign Contract Management Approach: PM MEP will work with BRDEC and the ATCOM contracting office to award one of the contracts to Mechron. The Canadian NDHQ is providing some assistance while DCMDI assistance is being put in place.

Foreign Item Maintenance Concept: The Army will establish an intermediate maintenance supply point with float stock within each theater. The supply point will exchange items turned in by field elements and make minor repairs. For major repairs, units will be returned to the manufacturers' designated repair facility. The repair facility will be required to provide for repair or replacement on a 15-day turn around basis. Limited replacement of fuses and filters will be allowed onsite by the operator IAW the operator's manual.

Estimated Test Item Quantities & Unit Costs: 12 units @ \$5K each

(2) Did	Vendor(s) give co	st estimates for providing their items:
Ŋ	es. □ No.	Written price & delivery schedule is available.
the vendo	_	. If approach for acquiring test articles is to purchase the foreign items, ha y are willing to provide test article(s) at no cost or through lease (as part of ion in this FCT)?
Ŋ	es, vendor and/or	foreign government has been asked.
	lo discussion conc	erning no cost loan or lease of test articles has occurred.
	itional explanation ase acquisition.)	1: (Add any other information that would be helpful in understanding the

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The Canadian Army is conducting First Production test on the Mechron 2kW set and all test reports and test data will be provided to PM MEP at no charge. User test data will also be provided as items are used in field exercises by Canadian personnel. Data rights to detailed drawings and specifications are owned by the NDHQ and will be provided to the US Army at not cost (to accommodate TC-Standard documentation and preparation of an updated purchase description using the Mechron set as the basis). Teledyne will provide their commercial testing data.

Continue on separate sheet if necessary

b. Acquisition of Production (Fielded) Items.

(1) Describe the acquisition strategy to acquire the foreign item after the FCT is completed assuming item met requirements. Provide contract strategy (sole source, full and open competitive solicitation, etc.), estimated unit costs and unit quantities to be procured and the planned logistic support strategy.

Production Acquisition Strategy: The contracts awarded to each vendor for the test articles will include two priced options for follow-on production. The approach consists of an initial Foreign Comparative Testing Program test and evaluation of the Canadian 2kW generator sets and U.S. Teledyne 2.5 kW generator sets in accordance with the Test and Evaluation Master Plan (TEMP). Based on successful completion of the FCT, one vendor will be selected for follow-on production options. The two options will satisfy immediate Army and Air Force user requirements. Additional production generators will be procured using a competitive procurement with a technical data package (TDP).

Production Contract Strategy: Two firm fixed price contracts with two priced options will be awarded to Mechron and Teledyne. Upon completion of the FCT test, one vendor will be selected for follow-on production. Option #1 will be exercised to provide 650 generator sets to satisfy Force Package #1 Army user requirements. Option #2 will be exercised to produce 650 generators sets to meet immediate Air Force requirements. Once the immediate needs of the Army and Air Force are met, a competitive procurement contract is planned for follow-on buys for the USAF, USMC, and rest of the Army. Follow-on contracts will be Full and Open competition based on a U.S. government TDP using the winning vendor's generator set as the basis. One vendor will be awarded a contract to deliver production models for an abbreviated Production Qualification Test. The test will validate a first article production unit to ensure it is in accordance with the approved TDP. Approximately 8500 generator sets will be produced to meet the Service needs.

Estimated Production Item Quantities & Unit Cost: 8,500 units @ \$5K each

Production & Fielding Logistic Support Strategy: New Equipment Training teams will be used to train the trainers in tactical elements.

(2) Sponsor Program Element for production procurement(s). Has a program element (PE) number been identified to fund procurement of FCT item(s)?

Yes. (Fill in the boxes below and identify the PE information):

POM Number Referenced: 9604

The PE Title: Tactical Quiet Generator

PE Number: SSN MA-9800

	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00
Dollars (\$M)	\$3.3	\$	\$	\$	\$	\$

(3) PE Manager/Champion. Provide name, rank, position, and organization of the most senior official who has agreed to support procurement if testing is successful. Attach correspondence if appropriate.

Name & Rank: MG James Coburn

E-mail Address (mandatory): jcoburn@apg-1.apg.army.mil

Current Position: Commandant and Commanding General

Organization: U.S. Army Ordnance Center & School

Phone: 410-278-1373 FAX: 410-278-1745

(4) Additional explanation: (Add any other information that would be helpful in understanding the production phase acquisition.)

About 1,300 production items are urgently needed. HQDA is expected to provide \$3.3M of reprogrammed funds for a first year LP-Urgent Sole Source buy of 650 units. The LP-U units are designated by HQDA for tactical Force Package #1 users. An additional 650 units are expected to be funded from the SMART-T Vehicle and PM MILSTAR Air Force Programs. The remaining known requirements are for urgent USAF and USMC needs. Anticipated future 2kW generator set procurements should go to 8,500 units.

Continue on separate sheet if necessary

10. Contracts Funded with FCT Money.

<u>a. Foreign contracts.</u> List all anticipated foreign contract awards or other procurement methods used to implement this FCT: vendor(s) name, estimated dollar amount of contract award(s), for product(s) and/or services to be provided.

Vendor Name	Total Contract Amt (\$)	Amount for Products	Amount for Vendor Services
Mechron Energy, Ltd.	\$80,000	\$60,000	\$20,000

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<u>b. U.S. Contracts.</u> List all anticipated US contracts by vendor, estimated dollar amount for each contract award in support or cooperation of the FCT. For US contractors, identify by vendor the amount of and location where funds are likely to be used. Note: FCT money shall <u>not</u> be used to acquire or test competing U.S. items.

U.S. Vendor Name and Location	Total Contract Amount (\$)	Amount for Products	Amount for Vendor Services

11. Sponsor RDT&E Contribution.

<u>a. Sponsor contribution.</u> Is the sponsoring service contributing resources to this FCT, i.e., funding all TDY trips, buying test items, paying for management and administrative support, etc.

Yes. Estimate the total amount by year:

	FY 95	FY 96	FY 97	FY 98	FY 99	Total
Dollars (\$M)	\$0.70	\$.28	\$	\$	\$	\$0.98

What is the service contribution going to be used for?

Supplement FCT test and evaluation funds and for travel-related expenses.

Continue on separate sheet if necessary

☐ No sponsor funding will be provided to test and evaluate the foreign item(s).

<u>b. Sponsor Funding of Competing U.S. Candidates:</u> If there is a US product competing to satisfy the sponsor's requirement (or there is a likelihood that a US product will compete in the sponsor's procurement phase after an FCT is completed), have funding and its PE manager been identified to fund the test and evaluation of all US item(s) competing against the foreign item(s)?

Yes. Identify amount by FY in PE to fund testing of domestic contender(s):

PE title: Tactical Quiet Generator

PE number: SSN MA-9800

PE Manager Name and Grade/Rank: MG James Coburn

PE Manager e-mail address (mandatory): jcoburn@apg.army.mil

Phone: 410-278-1373 FAX: 410-278-1745

PE Amount	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00
Dollars (\$M)	\$.40	\$.40	\$	\$	\$	\$

☐ No sponsor funding has been identified because there are no U.S. candidates.

12. Test and Evaluation.

a. Foreign Data Request. Has test and evaluation data been requested for the foreign item(s)?

Yes. From whom and when: Some data has been provided by Mechron Energy, Ltd. and the Canadian NDHQ. Both have agreed to share additional test data from ongoing first production tests. Data has been provided to PM MEP.

☐ No. Explain why not:

b. Foreign Data Use. Has foreign data been received and validated? How will it be used?

Yes. Preliminary validation of test data is being done by comparing the Mechron in house test data with Canadian Army data and the design specification. This analysis will be used as the basis for developing the traceability matrix, determining performance parameters and designing/refining the test plan to avoid unnecessary or duplicative testing.

c. Developmental Testing. Identify type & nature of developmental testing to be performed.

A combined Technical Test/Operational Test is being developed by TECOM/ATC and OPTEC/TEXCOM in coordination with other IPT members to insure it meets the Critical Issues and Criteria and other requirements identified in the TEMP.

Continue on separate sheet if necessary

□ No. Explain why:

d. Operational Testing. Is an operational test to be done?

Yes. By who? TECOM/ATC and OEC/TEXCOM will conduct a combined TT/OT at Aberdeen Proving Ground, and other operational tests will be conducted by TRADOC at Fort Drum and Fort Bragg as part of their CEP in conjunction with a planned ATD exercise. USMC will conduct separate service unique OT at Camp Lejuene and 29 Palms Marine Corps Base.

<u>e.</u>	Key Performance Parameters.	Have KPPs been identified by the user?
	Yes. (attach list of KPPs)	No. When will KPPs be identified?:

f. Test Plan or Test & Evaluation Master Plan (TEMP). Has draft Test Plan or TEMP been prepared?

prepared?	
Yes. (attach) \(\square\) No. Give status:	

g. Test Phases. Identify the test phases and describe the major decision points during the evaluation?

Yes. Scheduled test phases include:

- Combined Technical & User Testing at TECOM/ATC.
- Operational Testing by USMC.
- Operational Testing under TRADOC CEP.
- Logistics demonstration at Ordnance Center and School under CASCOM.

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The major decision point is the Milestone I/III (TC-Generic) to be followed by TC-Standard decision, if feasible. T&E can be suspended or terminated during any phase where test results warrant.

Continue on separate sheet if necessary

13. Issues. List all. For example: political impacts, Congressional interest, U.S. production base concerns, past history, 'Buy America' Acts, offset arrangements, etc.

Production funding for the Less Than 3kW generators is not specifically identified as a separate line item in the budget; however, the Army PM MEP PE line for Tactical Quiet Generators does exist and those funds can be reallocated by the PM as necessary to meet the most urgent DoD requirements. Also, since many of the 3kW generator requirements can be satisfied with a less costly 2kW generator, the Army will reprogram some 3kW generator funds to support this acquisition effort.

Teledyne has solicited support from the Congressman in their district where the plant is located. If Teledyne does not win the contract, jobs could be lost in that district.

Continue on separate sheet if necessary

14. Attachments.

- Encl 1: Project Chart (mandatory)
- **Encl 2: Item Picture(s) (mandatory)**
- **Encl 3: CBD Announcement (mandatory)**

List continuation sheets

None

List other attachments, e.g. requirement, memos of support, etc.

- Encl 4: Message requiring single fuel (diesel) on battlefield.
- Encl 5: ORD for less than 3kW generators.
- **Encl 6: Acquisition Strategy Summary Report.**
- Encl 7: Draft Purchase Description for Less Than 3kW Generators.
- Encl 8: Critical Issues and Criteria, Key Performance Parameters for Less Than 3kW Generators.
- Encl 9: TEMP for Less Than 3kW Generators.

PERIODIC PROGRESS REPORT

for [Time Period]

Project Title: List project name (use same name as approved FCT Proposal).

Candidate(s): List name of candidate(s), contractor, and country of origin.

Sponsor: U.S. <service & organization> list sponsoring organization that is executing

project, POC name and commercial phone number. Two line maximum, a

full address is not needed.

Accomplishments During the Last Reporting Period:

- State what was accomplished in the reporting period just completed.
- Must address any Milestone events.
- Do not repeat historical information from previous reporting periods nor descriptive project information.
- Moderate use of common acronyms is acceptable.
- Bullet statements are preferred.

Planned Actions in the Next Reporting Period:

- State what is planned for the next reporting period.
- Bullet statements are preferred.

Issues:

- Identify and discuss issues to be resolved to allow/enhance procurement potential, state what the PM is doing and what type of help is needed (if any) and from whom.
- Issues may be something for which higher HQ help is needed or may be used to inform higher HQ of what actions are being worked or are of potential concern.
- Identify and discuss cost growths or scheduled delays.
- If no issues, so state.

Limit periodic project reports to one text page plus a baseline project chart annotated with current project status information.

The project chart should be updated as of the end of the reporting period. Funding actions and completed milestones for the period should be clearly indicated.

PERIODIC PROGRESS REPORT

for 4th Quarter FY 96

Project Title: Less Than 3Kw Generator Set

Candidate: 2Kw 60 hz Military Tactical Generator Set; Mechron Energy System, Ltd.;

Canada

Sponsor: U.S. Army Project Manager Mobile Electric Power (PM MEP), AMCPM-MEP, LTC

Jeff O'Connell, (703) 806-7827

Accomplishments During the Last Reporting Period:

- The first option of the sole source contract was exercised for the LT3Kw Gen Set (Mechron Energy System, Ltd., Canada) and consisted of 650 each 2Kw 60 Hz Military Tactical Generator (MTG) Sets (contract #DAAKO1-96-C-0045). Delivery of the first production lot and Interim Support Items List components was received in September. Production deliveries will continue through March 1997.
- This first option will equip the Force Package #1 Users with the Mechron 2Kw MTG Sets beginning by 2QFY97. Fielding and Fielding Briefings began in September at Fort Hood and Fort Bragg.
- New Equipment Training (NET) and Instructor & Key Personnel Training (IKPT) were conducted by Mechron in July at the Aberdeen Test Center, APG, MD.

Planned Actions in the Next Reporting Period:

- Fielding will continue at all scheduled sites.
- A total quantity of over 8,500 sets could be procured under this multi-year contract over five ordering periods if all options are exercised.
- This is the last Quarterly Report to be submitted on this project.

Issues:

• Teledyne has initiated a letter to the Congressman of their district to protest the award to Mechron.

1,000,000.00

1.500.000.00

987,654.32

1,420,086,42

Period of Report:

Project B

Totals⁷

FCT FINANCIAL SUMMARY REPORT FORMAT

	Funds: FY				
Project Name ¹	DoD Funding Provided ²	Service Committed ³	<u>Service</u> <u>Distributed</u> ⁴	Service Obligated ⁵	<u>Service</u> <u>Expended</u> ⁶
Project A	1,000,000.00	900,000.00	500,000.00	500,000.00	432,432.10

1,600,000.00

2,500,000.00

1,500,000.00

2,000,000.00

Sample data for demonstration only.

Sponsoring Organization: U.S.

1,500,000.00

2,500,000.00

Note: All amounts listed shall be cumulative for the applicable fiscal year as of the end of the reporting period.

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¹ List projects by same name used in the FCT Periodic Progress Report.

² List, by project, FCT funding provided based on individual service proposal/current DoD allocation.

³ List, by project, the FCT funds available to the FCT project management office for ultimate execution.

⁴ List, by project, total FCT funds distributed pending obligation.

⁵ List, by project, total funding accepted by activities for performance of services or products, contractual or in-house.

⁶ List, by project, total amount of reimbursable billings and contract payments disbursed, costed or accrued. Accruals must result in actual costs in a timely manner.

⁷ Total columns for projects shown.

SAMPLE FCT FINANCIAL SUMMARY REPORT U.S. Army FCT Periodic Financial Report

APPENDIX F

2nd Qtr FY97

Data as of 30 Jun 97

FY96 FCT Funding Status

Project Name	DoD Provided	Service Committed	Service Distributed	Service Funds	Service Obligated	% 	Expended	%	*
IME Support	250,000.00	388,584.66	388,584.66	100	388,584.66	100	388,584.66	100	
FCT TDY Spt	0.00	7,274.19	7,274.19	100	7,274.19	100	7,274.19	100	
Auto Chem Agent Alarm	889,000.00	1,011,486.47	1,011,486.47	100	1,011,486.47	100	399,388.48	39	A
JRAAWS Ammunition Upgrades	1,886,000.00	1,681,000.00	1,681,000.00	100	1,681,000.00	100	415,417.87	25	В
IM Hellfire Missile Motor	900,000.00	1,199,945.00	1,199,945.00	100	1,199,945.00	100	0.00	0	C
Metallic Mine Detector	1,780,000.00	1,780,000.00	1,780,000.00	100	1,780,000.00	100	1,775,131.49	100	
Standard Advanced Dewar Assembly II	130,000.00	264,981.00	264,981.00	100	264,981.00	100	115,576.62	44	
One Watt Linear Drive Cooler	101,000.00	101,000.00	101,000.00	100	101,000.00	100	0.00	0	
Improved Ballistic Armor Grille	350,000.00	245,000.00	245,000	100	245,000	100	2,710.47	1	
1.75w Linear Drive Cooler	0.00	246,200.00	246,200.00	100	246,200.00	100	0.00	0	
Standard Adv Dewar Assembly I	710,000.00	652,000.00	652,000.00	100	652,000.00	100	0.00	0	
Cordless Commo f/Combat Crewmen	245,000.00	229,381.52	229,381.52	100	229,381.52	100	45,224.13	20	
Russel Contract	0.00	100,000.00	100,000.00	100	100,000.00	100	100,000.00	100	
Universal/Precision Time Mortar Fuze	725,000.00	59,147.16	59,147.16	100	59,147.16	100	58,725.15	99	
TOTAL	7,966,000.00	7,966,000.00	7,966,000.00	100	7,966,000.00	100	3,307,973.06	42	-
A -ACADA: CBDCOM billings very slov B - RAAWS/SADA II/1w LDC: Slow Co C-IM Hellfire: Contract awarded Feb 97		RDS accounting system	n						

Nickel Projects (DoD)

Contract DAJA37-94-C-0127 403,854.30 403,854.30 100 403,854.30 100 355,994.63 88

PROJECT CHART FORMAT INSTRUCTIONS

Overview

The FCT Project Chart is a key management tool for submission of new FCT projects and reporting progress of current FCT projects. The project chart provides a means of monitoring performance and costs. The chart contains, on a single page, the planned and accomplished project actions, the planned fiscal schedule, and the actual fiscal status.

A FCT tracking and reporting system to be used to generate and maintain project charts is scheduled for field distribution and use in fiscal year 1998. Templates in a variety of computer formats are available.

Definitions

<u>Project Chart:</u> The one page format that lays out the project milestones, funding plan, and status. It is a mandatory part of the project quarterly progress reports.

<u>Proposed Project Chart:</u> Applies to a project being nominated as part of the Candidate Nomination Proposal (CNP). First enclosure to a CNP.

<u>Baseline Project Chart</u> The project chart will show the initial project plan and obligation schedule and will become the baseline. The baseline will not be changed during the life of a project without prior coordination and approval by DoD.

<u>Current Project Chart:</u> Shows current status of the project and will include completed milestones, current service contributions, DoD authorizations, obligations and expenditures. Required for periodic progress reports and continuing CNPs. Will likely include changes to the baseline plan and schedule.

<u>Periodic Financial Summary Report:</u> (as per Appendix F) This report covers the current and 5 previous fiscal years, and gives the funding provided, service allocation, commitments, obligations, and disbursements. The summary lists cumulative totals per fiscal year for the last five fiscal years.

Project Chart Layout

The Project Chart contains three sections, to enable easy correlation between actions or events (milestones), funding requirements, and actual financial status. Standardized milestones and financial categories (as listed below) will be used and indicated by quarter. The project chart should not exceed one page. ('Landscape' mode is recommended, as is use of a 'Spreadsheet' computer program to ease updating of funding figures.)

<u>Milestone Schedule:</u> As laid out by the CNP, the current milestone schedule will be presented. Shown will be the original (baseline) scheduled dates, any revision to those dates, and actual completed milestones.

<u>Funding Profile:</u> The baseline obligation plan will be shown with a breakout of expected FCT obligations.

<u>Financial Status:</u> Shown will be a summary of the current FCT financial status to include requests, authorization, distributions, obligation and expenditure data. Financial status information will be reported quarterly with the most up-to-date data available.(field data rather than DFAS figures).

Upon project approval, the project chart may be changed or updated (to reflect actions occurring between project submission and approval) which will become the initial "baseline" schedule.

Standardized Milestones

A milestone schedule will be presented by fiscal years and quarters. Project sponsors may want to track by months and place events accordingly, but headers will be listed by quarters. Emphasis will be on defined, measurable milestones, that represent work packages that can be monitored in terms of performance and cost. The milestones shown below are required (indicate N/A if not applicable). Add additional milestones as needed to describe project but keep chart to not more than one page.

The following symbols will be used. If the FCT Tracking and Report System is used, the appropriate symbols will be automatically generated.

- ∇ Original (baseline) scheduled milestone
- Δ --- ∇ Original planned time span
- ♦ Revised scheduled milestone
- **△--**▼ Actual start and end dates.
- ♦ Actual, revised accomplished date
- * See note

(See example charts following)

Required Milestones

<u>Project Approval:</u> The date when formal notice is received from DoD that a project will be funded. Soon after this date, a "baseline" schedule/funding plan will be forwarded to DoD which will become the basic "contract" between the sponsor and DoD.

<u>Initial Funding Received:</u> The date when funding is first received by the sponsor. For incycle new start projects, this will normally be October.

<u>Contract Preparation & Award / Acquisition Agreement / MOU:</u> (indicate which) The date(s) for preparation and formal agreement between the U.S. and the manufacturer / vendor / representative of the item to be evaluated. Milestone may be contract award, loan agreement signing, or similar legal instrument.

<u>Test Item Received:</u> The date when the item will be available for test and evaluation. Indicate on the schedule if multiple items will be received at different times.

<u>Test Plan:</u> The defined period from beginning of the development of the test plan through the date that the approved test plan will be forwarded to OSD. Specify the type of test plan such as "Evaluation Plan," "Test Design Plan," "Detailed Test Plan," "Summary Test Plan," or similar plan.

<u>Technical Test(s)</u>: The defined test period (start - end dates) the item is under testing. The test period should not include the slack time such as waiting for a test range, but should include any 'data analysis' time until results are available. Some potential sub-milestones may be: test period(s), test report, safety release f/OT, or testing at multiple sites. If testing consists of multiple phases with decision points between the phases, this should be clearly shown.

Operational Test: Indicate 'none' if no OT is planned. Include sub-milestones for OT tests and/or OT test report, as appropriate.

<u>Evaluation Report(s)</u>: Indicate a milestone when the evaluation results will be available. Note this is not the test report, but the evaluators' position as to whether the item did or did not meet requirements.

<u>IPR/Decision:</u> All projects should be concluded with some decision; please include a milestone date when that decision will be made. In most instances, this will conclude the FCT project.

<u>FCT Close-out Report:</u> The date in which the formal close-out (or disposition) report will be forwarded to DoD. (See Appendix {I} for format.)

Optional Sample Milestones - Additional milestones may be added if appropriate, but keep chart to one page. Example of other potentially important milestones are:

- CBD Announcement
- FCT Solicitation Release
- Requirement Approved
- Screening Test
- Early User Test
- Test Report Distribution
- Type Classification, Generic
- Procurement Contract Award

Cost Elements / Funding Plan

This section of the project chart will be considered the obligation plan and actual figures will be tracked against the plan. Funding will be totaled both 'across' and 'down' where appropriate. The planned funding should correlate with the planned schedule. If there is a cost element listed, there should be a planned activity shown under project activities. List the organizations performing the activity. List figures to the nearest thousand dollars. List only those items or

categories that will be funded by FCT; service contributions are shown on a separate line. At the end of the quarter the planned dollar obligation figures will be replaced with actual values.

Like the standardized schedule milestones, all top-level financial categories shown below will be listed even if zero.

<u>Test Item Acquisition:</u> Use sub-categories as appropriate:

Hardware Acquisition: Indicate Purchase, Lease, or Loan Contractor Support: Services other than item acquisition

Contractor Training: Equipment training of government personnel in use of item for T&E purposes.

Logistics Support: Such as a spare parts package, or maintenance needed during T&E.

Shipping: If not included in hardware price

<u>Test Item Integration:</u> Include the cost of modifying test item before test & evaluation.

<u>Targets, Ammunition or other GFE:</u> List cost of government assets to be consumed or used in testing.

<u>Technical or Management Support:</u> Activities include contract preparation, contract support services, test & evaluation support, and IPR package development. List sub- tasks as appropriate. Travel (TDY) costs will not be included on this line.

<u>Testing:</u> May include all T&E efforts accomplished by testing activities; such as test planning and writing, development tests, operational or user tests, data analysis, and test reporting.

<u>Evaluation</u>: Normally accomplished by evaluation activities, this may include a technical or operational evaluation and will be concluded with an evaluation report.

<u>Travel:</u> TDY costs are not to be included in the above lines, but will be listed separately if funded by FCT. If appropriate, list domestic and foreign travel separately. DoD strongly recommends that sponsoring activities fund their own travel expenses.

<u>Totals by Quarter:</u> List overall funding requirements by quarter by summing the individual quarterly requirements.

<u>Contractor Support:</u> All Science, Engineering and Technical Assistance (SETA) and Contract Administrative Support Services (CASS) contract support costs will be listed separately, even if included above. This is necessary for DoD to determine the funding that is going to both government and contractors for any one project

Financial Status Reporting

For periodic progress reports and ongoing project CNPs, the following financial information should be reported by quarter. These will be the actual amounts for actions accomplished. Once a given quarter is past, there should be no need to change the figures for that quarter for the life of the project. Figures may be negative to indicate withdrawals or reprogramming in the quarter that it occurs. The percentage of funds received to requested and issued, obligated, and expended to received, may be included.

<u>FCT Funds Requested:</u> List amounts requested for project by fiscal year. These should match the funding plan quarterly break-out.

<u>FCT Funds Provided:</u> List amounts authorized by DoD and programmed by the managing service activity.

<u>Service Contribution:</u> If other than FCT funding will be used for this project, please list by year. It may also be appropriate to state the source (such as a given PE) and what the funding will be used for.

The next three sections will be reported by fiscal year of the FCT funds provided. List, by quarter, the amounts committed, obligated and expended in that quarter. Figures may be negative if appropriate. Being historical data, there should be no need to change past quarters once reported.

<u>Committed:</u> amount distributed, issued, and/or committed to this project. For the purposes of this report, funding need not be decommitted when obligated.

<u>Obligated:</u> amount obligated by contract award, reimbursable project order, approved travel orders, or similar instrument.

<u>Expended:</u> amount disbursed, costed or accrued. Accruals must result in actual costs in a timely manner.

Notes may be added to project chart as required if milestone actions or financial categories are not adequately explained by accompanying narrative.

Updates

The project chart should always show the actual milestones and obligations for all past quarters. If an expected obligation does not occur, the plan should show that and move the obligation to the new expected quarter.

The project chart should report incremental amounts for the actions in a given quarter; the past remains constant once the quarter is closed out.

Foreign Comparative Testing Program - Project Chart Sponsor: DOD/US Army PM MEP

Project Title: LT3KW Gen Set

110ject Title. L13K	W Gell Bet	1		100=		1			ODIOL	7 1 111111				1			о вере	
			1	1995			1	1996				1997			FY 1			Symbol
Project Activities	Performing Org	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Key
Project Approval	OSD	V																Scheduled
Initial Funding Received	IME	•																Δ Start
Contract Prep & Award	ATCOM		▼															∇ Completi
Test Item Received	ARMY, USMC			♦▲	▼													♦ Change
Test Plan	ARMY, USMC			◇▼														
Technical Test	ATC			♦			V											Actual
Operational Test	ARMY, USMC			A			V											▲ Started
Evaluation Report	ARMY, USMC					∇												▼ Complete
IPR/Decision	ARMY, USMC						V											◆ Change
FCT Close-out Report	IME							V										
Tech Data Package	PM MEP		1			V												
Production Buys	ATCOM					∇												
First Unit Equipped	FPP #1								∇									
Cost Elements / Funding Plan	n (\$K)	•	•	•		•				•				•				Totals
Test Item Acquisition	Mechron/Teledyne	60																60
Test Item Integration	N/A																	0
Targets/GFE	N/A																	0
Technical Support	BRDEC/PM MEP		40															40
Test Support	CECOM		50	16	5													71
Testing																		0
Technical	TECOM/BRDEC		100	180		60												340
Operational Army	Ft Bragg/Drum			30			30											60
Operational USMC	Quantico/29Palms			24			24											48
Evaluation	ARDEC/YPG			13	13													26
Travel				2	2													4
Totals by Quarter		60	190	265	20	60	54	0	0	0	0	0	0	0	0	0	0	649
Symbology Key	Funding Summary		FY	1995			FY	1996			FY	1997			FY 1	998		Totals %
•	FCT Funds		5	35			1	14				0			0)		649
Λ = Scheduled Start	FCT Funds Provided		5	35			1	14				0			0)		649
∇ = Scheduled Completion	Service Funds		1	10			6	58				0			0)		178
	FY96 FCT																	0 (
. Strictic Charge	FY96 FCT Obligated									-	-							0 (
▲ = Actual Start	FY96 FCT Expended																	0 (
▼ = Actual Completion	FY97 FCT																	0 (
♦ = Change Occurred	FY97 FCT Obligated													lane.				0 (
• = Change Occurred	EV07 ECT Expanded		Funds no	ot vet									1					0 (

PROJECT MANAGER SIGNATURE: DATE:	PROJECT MANAGER SIGNATURE:	DATE:
----------------------------------	----------------------------	-------

Revised: 31 October 1995 **Data as of:** 30 September 1995

0

0

0

0

0

0

0

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Funds not yet

available

Funds not yet

available

FY97 FCT Expended

FY98 FCT Obligated

FY98 FCT Expended

FY98 FCT

The following should be used as a guide for subjects to include in the FCT close-out report. Report will summarize the events of the FCT and will serve as the permanent final record of the project. Report normally should not exceed four pages and should be written as an executive overview.

FCT CLOSE-OUT REPORT

1. References. Reference item requirement, other significant correspondence, and previously supplied test and evaluation reports.
2. Introduction and Background. The purpose of this memorandum is to provide the FCT Program Office the final close-out report on the <fct project="" title="">. The project manager for this evaluation was</fct>
3. Requirement. Review requirement for the item, state why evaluation was undertaken. State goal of the FCT.
4. Candidates: List names, origin country, and contractors of items evaluated.
5. Testing.
A. Project was approved and first funded on <date>. Summarize FCT funding by FY applied to project.</date>
B. A contract was awarded to for test items at approximately \$ Test items were received and testing was begun at
C. Briefly review testing performed.
D. Testing was completed and the test report (reference _) was distributed on
6. Results. Review test results against the requirement.
7. Disposition. Give disposition of test items after FCT was completed.
8. Follow-on Actions: Identify procurements to date resulting from this FCT by numbers of items and total value. A contract number will also be helpful in tracking additional procurements through options. Estimate R&D savings and/or time savings that resulted from this FCT.

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9. Give POC for follow-up information on this project.

FCT CLOSE-OUT REPORT Less Than 3kW Generator

- 1. References. ORD 160-135 dated 14 July 1994; FCT proposal; Quarterly Project Reports.
- 2. Introduction and Background. The purpose of this memorandum is to provide FCT Program the final close-out report on the Less than 3kW Generator Set FCT Project. The project manager for this evaluation was COL Becker.
- **3.** Requirement. The requirement for a Less Than 3kW generator set is captured in ORD 160-135 dated 14 July 1994. The declared obsolescence of existing gasoline powered 1.5kW generator sets and the absence of gasoline on the battlefield after 1999 combined to create a requirement for a Less Than 3kW generator set that was portable, multi-fueled, and capable of meeting specified power generation requirements. The goal of this FCT was to test and evaluate a nondevelopmental foreign item that appeared to have the potential to meet the requirements.
- 4. Candidates: 2kW Generator Set, Canada, Mechron Energy, Ltd. 2.5kW Generator Set, U.S., Teledyne
- 5. Testing.
- A. Project was approved and first funded on 1 Oct 1995. The project received \$535K in FY 95 and \$570K in FY 96.
- B. A contract was awarded to Mechron Energy Systems, Ltd. and Teledyne for 12 test items at approximately \$5K each. Test items were received in April 96 and testing was begun Apr 96 at Aberdeen Proving Ground.
- C. Both operational and technical testing were performed. Operational tests were conducted in the field environment at both Ft. Bragg and Ft. Drum. The USMC also conducted Service-unique operational tests at Camp Lejuene and at 29 Palms Marine Corps Base. Technical testing was conducted by TEXCOM at Aberdeen Proving Ground.
 - D. Testing was completed July 96 and the test report was distributed on 1 October 97.
- 6. Results. All testing supported the manufacturer's data and performance claims. The test results demonstrated that the Mechron 2kW Generator Set met the US Army performance requirements as specified within the ORD and provided best value over the Teledyne generator.
- 7. Disposition. Mechron test items were retained by the US Army and put into service at Aberdeen Proving Ground in the Ordnance School.
- 8. Follow-on Actions: The first option to the Mechron contract (contract #DAAKO1-96-C-0045) was exercised for 650 2kW Military Tactical Generator Sets . First deliveries took place in September. Fielding of these generator sets to Force Package 1 units at Ft. Bragg and Ft. Hood should occur in 2QFY97. The second option will be exercised next year to meet Air Force immediate requirements. The follow-on options provide the potential for 8,500 sets to be

produced for the Air Force, Marine Corps and the rest of the Army. This FCT has saved an estimated \$2M in RDT&E and 2 years in fielding time. There is a production savings of \$3K per unit procured.

9. POC for follow-up information on this project: Mr. Al McKee